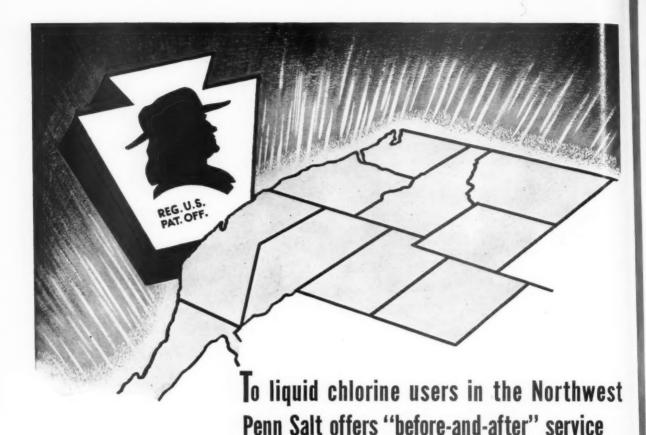


Pulps Paper



Penn Salt's effective "before-and-after" service is one reason why many manufacturers, including the leading pulp and paper mills in the Pacific Northwest, turn to Penn Salt for liquid chlorine.

BEFORE liquid chlorine is shipped from our Tacoma plant, containers are thoroughly cleaned. Tank cars and cylinders are carefully overhauled and twice inspected for leaks after loading. You're assured of safe, clean and workable equipment.

FTER Penn Salt Liquid Chlorine reaches your plant, our service engineers can be of real help to you... by periodically inspecting chlorine handling equipment... by demonstrating improved methods of connecting and running chlorine lines... by making suggestions as to the safest and most efficient ways to use liquid chlorine in your processes.

Write or wire us for full information on how you can profit with Penn Salt's "before-and-after" service.

Among the products of this Company used by Western industries are:

LIQUID CHLORINE
CAUSTIC SODA
SODA ASH
CRYOLITE
CALCIUM HYPOCHLORITE
KRYOCIDE
PENCHLOR ACID-PROOF
CEMENTS
ASPLIT CEMENT
CAUSPLIT CEMENT
PENNSALT CLEANERS
PENNPAINT
ANHYDROUS AMMONIA

MANUFACTURING CO. OF WASHINGTON

TACOMA, WASHINGTON



The Journal of the Pacific Coast Industry

AUGUST • 1941 Vol. 15 – No. 8

MILLER FREEMAN President

LAWRENCE K. SMITH Manager

> HARLAN SCOTT Editor

KEMPER FREEMAN Production Manager

MILLER FREEMAN, JR. Circulation Manager

OFFICES

Seattle

PUBLISHING OFFICE 71 Columbia St. Tel. MAin 1626

Portland

Louis Blackerby 1220 S. W. Morrison St. Tel. AT. 8890

> San Francisco Stuart F. Leete 121 Second St. Tel. GA. 5887

Los Angeles 124 W. Fourth St. Tel. MUtual 5857

SUBSCRIPTION RATES

United States	84.00
Canada	\$4.50
Other Countries	
Single Copies	
Review Number	81.00

Sorg Paper Company Buys Port Mellon Mill

Sorg Paper Company of Middletown, Ohio, exercises option taken in November, 1940, to buy the mill within two years, as part of contract made at that time to purchase entire output of 85 tons of kraft pulp per day.

SORG PAPER COMPANY of Middletown, Ohio, has exercised its option on the properties of Vancouver Kraft Corporation and has incorporated a new company known as Sorg Pulp Company, Limited, to operate the mill located at Port Mellon on Howe Sound, about thirty miles north of Vancouver, B. C.

Details concerning the deal have been withheld pending negotiations with the Canadian government at Ottawa regarding wartime exchange restrictions and capital investment, but the terms will probably be revealed within a few days, according to Reginald H. Tupper, representing the Sorg company's legal interests in British Columbia.

F. W. Leadbetter of Portland, Oregon, formerly president of Vancouver Kraft Corporation and the man who reorganized the company for kraft pulp production a few years ago, is expected to withdraw entirely from the project when the Sorg interests assume full control.

The Sorg Pulp Company, Limited, will have a capital of \$1,500,000 and a subsidiary to be known as Sorg Towing Company has been formed with a capital of \$10,000. The latter will probably operate tugboat service between Port Mellon and Vancouver.

Whether it is proposed to make important improvements at the Port Mellon mill has not yet been indicated, but the general understanding is that the Sorgs intend to make their plant a fully-equipped producer, capable of turning out several lines in addition to kraft pulp. The present capacity of the mill is 85 tons, kraft pulp being the exclusive product, although the company has been operating a sawmill in conjunction with the pulp plant.

The sale marks another chapter in the up-and-down history of the Port Mellon enterprise. In the late 1920's an effort was made to bring the plant into production, but the collapse of the stock market delayed

After months of litigation the company was, in 1937, reorganized and started production as Port Mellon Operating Company. Its chief market was Japan, but when Japanese credit became contracted due to war conditions in the Orient and other factors the mill was shut down after operating only about six months.

In December, 1940, the company resumed production following incorporation of Vancouver Kraft Corporation and the negotiation of a long term contract with the Sorg Paper Company for the purchase of



The SORG PULP COMPANY, Ltd., kraft pulp mill at Port Mellon, B. C., formerly the Vancouver Kraft Corporation.

its entire output. With this contract went an option to buy, and this option has now been exercised.

The Sorg Paper Company, of which J. A. Aull is president, operates three divisions at Middletown, the Sorg Division, the Smith Division and the Oglesby Division. The Sorg Division, with two fourdriniers and one cylinder machine produces approximately 85 tons per day of tag boards, duplex papers, waxing, sulphite, jute specialties and facial tissues. The Smith Division, with one fourdrinier, produces around 85 tons per day of sulphate specialties, and the Oglesby Division, with two fourdriniers, produces 50 tons of bond, card index, offset and miscellaneous book papers per day.

L. S. McCurdy Dies At Port Townsend

• L. S. McCurdy, paper mill superintendent for the National Paper Products Company, Division of Crown Zellerbach Corporation, Port Townsend, Washington, died in that city on August 1st after a long illness. Burial was in Port Townsend August 5th under the auspices of the Elks.

Mr. McCurdy had a wide circle of friends not only among the men in the Pacific Coast industry but throughout the country. In 1937 he served as first vice chairman of the Pacific Coast Division of the American Pulp & Paper Mill Superintendents Association and in 1938 as chairman. In the latter year he was elected a vice president of the national Superintendents and served until this past spring when ill health forced him to

He had been paper mill superintendent of the large kraft paper and board mill at Port Townsend since production started in 1928. His work in the paper industry began when he was but 14, with the Combined Locks Pulp & Paper Company. He remained there for more than six years and then worked for the Wis-consin River Pulp & Paper Company at Stevens Point and the Dells Paper Company of Thorold, Ontario.

From the latter mill he moved to the Kalamazoo Vegetable Parchment Company as machine room superintendent. He next became assistant superintendent for the International Paper Company at Niagara Falls, N. Y. Then he went to Cuba for five years as general superintendent of the Paperlera Cubana at Havana. Returning to the United States Mr. McCurdy became superintendent for the Albemarle Paper Company of Richmond, Virginia. In 1928 he left Albemarle to become paper mill superintendent at Port Townsend.

Mr. McCurdy is survived by his wife

and two daughters.

Swedish Ship Losses To End of June

• Up to the end of June, reports the U. S. Department of Commerce, 99 Swedish merchant ships, totaling 264,830 gross tons, had been sunk as a result of the war, and 26 merchant vessels of 46,-923 gross tons had been seized by belligerents.

Pulp Mill Proposed For Polson, Montana

• For the past six months there has been much discussion of the possibilities of constructing a pulp mill at Polson in Northwestern Montana at the southern end of Flathead Lake.

The residents of this part of Montana have long believed that their large stands of Englemann spruce would have greater value if converted into wood pulp than into lumber and that such conversion would permit the establishment of a sustained-yield forestry program. Experts in the industry were of the opinion that pulp mills could not be profitably operated in Montana as long as large quantities of low cost wood pulp came in duty free from Scandinavia. They pointed out that even mills on the Pacific seaboard with the aid of lower than rail water freight to the Eastern consuming centers could not produce at a profit during periods when the market was being raided by foreign producers.

How then, they asked could an inland mill exist and pay the higher rail freight rates on incoming chemicals and outgoing pulp?

The elimination of pulp imports from Scandinavia, together with the rapid increase in demand for wood pulp in the United States and South America, caused several prominent citizens of the Polson district to reason that this might be their opportunity to establish a pulp industry, provide employment for a number of men and utilize over-ripe spruce which needed to be removed to make room for young trees. Their idea was further encouraged by the development of spruce shipments from Northern Idaho to Wisconsin pulp mills. They believed that if spruce could be shipped that distance economically it was certainly possible to turn it into pulp close to its source and then ship the pulp.

Early in the year they called in Tom G. Taylor, who in the 1920's was instrumental in financing several Pacific Coast mills. Mr. looked the situation over and in turn called upon L. A. DeGuere, pulp and paper mill engineer of Wisconsin Rapids, Wisconsin, with whom he had worked on the Pacific Coast. Options on timber tracts adjacent to Polson were taken and Mr. DeGuere came West in May to make a study of the situation. He is now completing his report together with pre-

liminary plans for a pulp mill and these will shortly be turned over to Mr. Taylor and the Polson men who are back of the projected plant.

Mr. DeGuere advises PACIFIC PULP & PAPER INDUSTRY that, "There is a splendid opportunity for a mill there and if it could be built and put into operation in a reasonable length of time there is no doubt of its success.

"I am of the opinion," advises Mr. DeGuere, "the world situation with respect to the source of supply of chemical pulp will be definitely altered and for a long time to come, if not forever. I may be wrong, but I doubt if the Scandinavian countries will ever be the factor in the pulp business in so far as this country is concerned they have been in the past, which means this country, with the aid of Canada, will be called upon to provide most, if not all, the United States' requirements. If so, there should be room for more pulp mills in the United States, and Northwest Montana is a good place for one or more mills. With the disruption of ocean shipping and the necessity of moving larger quantities of pulp from the West Coast by rail, Montana is not at a disadvantage in this respect.

"The pulpwood in that locality is of an excellent quality and produces a fine grade of unbleached sulphite pulp which is borne out by its use Wisconsin mills. These same mills have been bringing the same species of spruce from Idaho to the extent of several thousand cords per year and speak very highly of it. The wood is somewhat light in weight as compared to spruce from nearer sources, but it is so much more sound and generally clean that in the finished product they get a better pulp at no greater cost for wood per ton of pulp than the local wood."

On page 36 of the February, 1941, issue appeared detailed data on the shipments of Idaho wood to Wisconsin pulp mills.

Hawley Installs New Hood on No. 2 Machine

 Number two paper machine of Hawley Pulp & Paper Company, Oregon City, Oregon, was shut down July 31st to complete the installation of a Drew and Hoffman hood. The paper ma-chine resumed production of paper the next day.

Y

nd

to

en

nt.

IC

at,

or

ilt

n-

ıbt

ses

on

oly

elv

ne,

ut

ın-

he

ın-

in

be

ot

ts.

or

d

a

ls.

p.

ng

he

ot

is

es

ite

ne

ne

he

er

it.

in

m

ch

at

a

or

al

ta to

British Columbia Pulp Expanding Both Mills

The British Columbia Pulp & Paper Company, operating bleached sulphite pulp mills at Woodfibre and Port Alice, producing paper and dissolving grades, has been authorized by the Canadian government to proceed with the expenditure of \$750,000 on an important expansion program that will increase production by 80 tons daily.

Present rated capacity of the company's two plants is 150 tons each and under the new program each mill's output will be increased 40

Under a similar arrangement Powell River Company was recently authorized to go ahead with expenditure of \$900,000 in connection

with its unbleached sulphite pulp plant.

One new digester, 18 by 56 feet, will be installed at Woodfibre and one at Port Alice, B. C. The digesters were originally constructed for the Lake Sulphite Pulp Company, which was formed in Ontario several years ago but which went into liquidation in 1938 before completion of the plant.

For the Woodfibre plant a boiler and a 2,000 kilowatt steam turbine have been purchased from the smelting plant formerly operated at Anyox by the Granby Consolidated, Mining, Smelting & Power Com-

pany.

Dominion Bridge Company has been given the contract for erecting the digesters, and Dominion Construction Company will construct

the digester buildings.

Preliminary work on some of the minor aspects of the construction program has already been started, and both mills will be in full production on the new expanded basis by early 1942, President Lawrence Killam expects.

Most of British Columbia Pulp & Paper Company's market is now in

the United States.

A few years ago a large proportion of the company's production was sold in the Orient, but no shipments have been made to that quar-

ter for many months.

In 1937 the company carried out a \$1,000,000 program to improve the quality of its products and convert its mills to produce bleached sulphite and rayon pulps exclusively. Previously it had manufactured a considerable amount of the unbleached product.

Company has also won important tax concessions from the Canadian government. Without them it would have been difficult to finance the present expansion. Under a recent amendment to the Income War Tax Act and the Excess Profits Tax Act the company will be allowed to write off its new investment, stated in a special Ottawa order-in-council at \$741,000, in from three to four years. The act allows a special depreciation allowance in each year, equal to one quarter of the cost of the depreciable assets included in the project.

Mr. Killam says that additional expenditures not covered in the Ottawa tabulation will bring aggregate cost of the plant expansion to more than \$750,000. The general effect of the expansion will increase production by about 25 per cent.

As a result of wartime demand the two plants operated by the company have been producing about 350 tons of pulp daily, although the improvements carried out in 1937 were expected to make the normal rate of production about 300 tons—150 tons at each mill. Mr. Killam conservatively estimates that by the time all present plans are carried out the company will be producing about 440 tons daily.

The company, in an effort to confine purchases in Canada to as great an extent as possible, plans to utilize some of the equipment of the dismantled plant at Swanson Bay, which has not been in operation since the old days of the Whalen Pulp & Paper Company, which preceded the British Columbia Pulp & Paper Company before its assets were taken over by the new organization. Pulp screens and drying equipment will be moved from the Swanson Bay plant, which for more than a decade has had only a caretaker on the job.

The British Columbia Pulp & Paper Company's program brings total expenditure now authorized for extension of the pulp and paper industry in British Columbia to more

than \$2,250,000.

Powell River Company is now proceeding with expenditure of about \$980,000 in improvement of its unbleached sulphite facilities.

Westminster Paper Company at New Westminster is making plant

British Columbia Pulp & Paper alterations to the value of about \$200,000, and Pacific Mills, Ltd., at x concessions from the Canadian Ocean Falls has been carrying out a pyernment. Without them it would major housing program.

All this expenditure is exclusive of the \$1,000,000 investment represented by Powell River Company's construction of a new permanent dam at Lois River to replace the temporary log crib constructed about ten years ago.

Indications are that considerable capital will also be invested shortly at the Port Mellon plant of Vancouver Kraft Corporation following its acquisition by Sorg Paper Com-

Columbia River Drilling Well

• Columbia River Paper Mills, Vancouver, Washington, has contracted the drilling of a 24-inch well to Al Johnson Drilling Company of Portand, Oregon. The well is being drilled to provide water for the new paper machine which will be installed in the next few months. When completed about the middle of August the well will be about 125 feet deep and is expected to deliver 2,000 gallons of water per minute.

Puget Sound Ball Team Wins From Weyerhaeuser

● The soft-ball team of the Puget Sound Pulp & Timber Company at Bellingham has proved to be tough competition for other teams in Bellingham and Everett. Not only has the team won first place in the fast City League of Bellingham, but it has won a free-hitting double-header from the team from the Everett Mill, Pulp Division, Weyerhaeuser Timber Company. In the games with Weyerhaeuser the scores stood at 15 to 4 and 15 to 6.

Another double-header between the two teams is scheduled for August in

Bellingham.

Pete Onkels Back From Eastern Trip

• P. J. "Pete" Onkels, superintendent of the Pacific Coast Paper Mills tissue manufacturers of Bellingham, is back from a three weeks trip to the middle west. He visited in Kaukauna, Green Bay and Appleton, Wisconsin before swinging down into Indiana to pick up a new car. A number of paper mills were included in his itinerary.

Oberdorfers Vacation In Alaska

Max Oberdorfer, president and general manager of St. Helens Pulp & Paper Company, St. Helens, Oregon, accompanied by Mrs. Oberdorfer, vacationed in Alaska from June 25th to July 13th, going as far North as Fairbanks.



This stamp appears on every bale of Weyerhaeuser Chemiclean sulphite pulp produced at the mill in Everett, Washington.

Weyerhaeuser Introduces "Chemiclean" Sulphite

Aiming to improve unbleached sulphite pulp through chemical cleaning—Part of a program to improve quality, conserve timber and increase efficiency.

PERATION of the new chemical cleaning plant at the Everett Mill of the Pulp Division, Weyerhaeuser Timber Company, began in April of this year. Since then the total production, about 250 tons daily, has been of the new quality, and this type of pulp will be manufactured exclusively because of the nature of the operating changes which are now incorporated in this modern mill.

What is "Chemiclean"? Primarily, it is the result of a different approach to the problem of removing dirt from unbleached sulphite. The development to produce Chemiclean employs chemical treatment in attacking the problem of dirt removal following the usual knotters, rifflers and flat screens.

In addition to providing a means of dirt removal, chemical cleaning is designed to give the pulp a cast particularly adapted to the requirements of converter mills which had formerly relied upon the best grades of European unbleached sulphite. Replacement of this type of pulp which has practically disappeared from the American market, has been a difficult problem for a large number of paper mills making a wide variety of papers.

Part of a Long Range Program

• The introduction of "Chemiclean" sulphite to the paper industry and the construction of the plant additions necessary to produce it, are but one part of a well worked out program embarked upon by the Weyerhaeuser Timber Company's Pulp Division.

The Weyerhaeuser Timber Company is fundamentally interested in obtaining the maximum economic utilization of its timber. This is another way of saying that the company is interested in the conservation of timber, for the reduction of waste in the processes of utilizing wood has as its end result the conservation of trees.

"Chemical Cleaning" developed out of the desire to convert a larger part of the log into pulp than is possible with present methods of cleaning. Before the Longview bleached sulphite pulp mill of the Pulp Division was completed in 1931, discussions began on the possibility of barking logs hydraulically. If hydraulic barking could be made feasible, then the wood lost by mechanical barking methods could be converted into pulp rather than into fuel.

For some years experiments have been carried on to determine the feasibility of removing the bark by high pressure jets of water. Many ideas were tried and discarded. Progress seemed slow for there was not only the problem of removing the bark and under layer with water at a pressure that would not require too much power, but it was essential that the operation be performed quickly. The log had to be indexed ahead as the water jet removed the bark and the operation synchronized and carried on at maximum speed.

The experimental work was successfully completed a few months ago and Weyerhaeuser has begun construction for the installation of an hydraulically operated log barker at the Everett Mill.

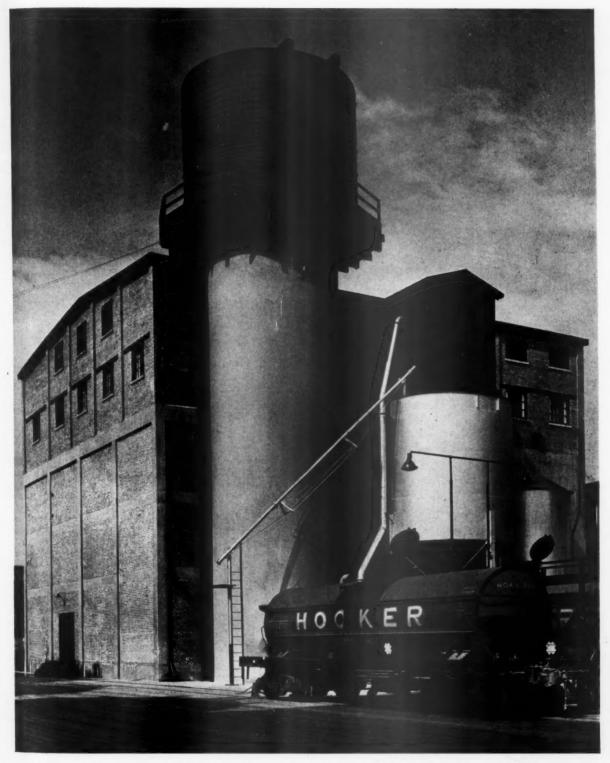
Whole Log Barking and Chipping

• The advantages of barking an entire log over the present method of sawing the log into cants and then barking the cants, are speed, reduction in handling, and the elimination of wood loss.

Once the log has been cleaned, the bark and the cambium layer removed, the economy achieved must be retained by simplifying the next steps.

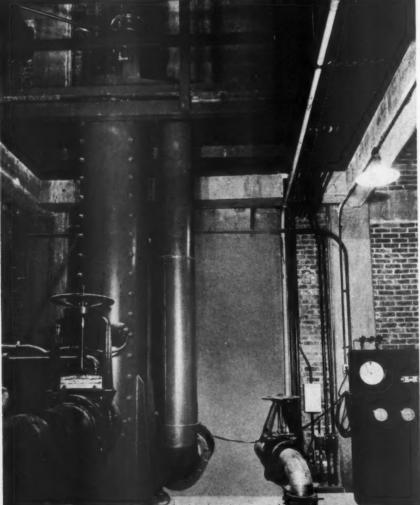
The chipping must necessarily be performed on a larger scale to avoid

Y



The Weyerhaeuser Chemical Cleaning Plant at Everett 1 1 1 The reinforced concrete tile lined continuous reactor is surmounted by the white water tank which weighs 225 tons when filled 1 1 The air system for unloading lime from box cars is shown together with the steel storage tank 1 1 The chlorine unloading system appears at the lower right.





the loss of wood incurred by sawing the log into small cants. This led to the designing of the log chipper. Along with the hydraulic log barker at Everett, Weyerhaeuser will install a chipper large enough to handle logs up to 40 inches in diameter.

This chipper, now being built, has a disc 14 feet 3 inches in diameter, 10 inches thick, and carrying 52-inch knives. The disc will be mounted on a shaft 19 inches in diameter, and will be driven by a direct connected 1,000 h.p. wound rotor motor. It will be a truly giant chipper, the rotating part weighing approximately 35 tons.

The Third Step—Chemical Cleaning

• Greater care in wood cleaning has to be exercised in the production of unbleached sulphite pulp than in bleached sulphite. In making unbleached sulphite the bark and knot dirt must be taken out in the wood preparation department or the pulp is dirty.

The preparation of wood for unbleached sulphite has been difficult for the knots had to be bored or sawn out along with the bark seams and other defects within the log. This has required breaking the log down into small cants to make visible these dirt producers. Much handling, equipment and power has been required.

With all of this work eliminated by hydraulic barking and the log chipper, there still remained the problem of the hidden small black knots and bark seams common in Western hemlock. Since it was known that bleaching removed this type of dirt, experiments were decided upon to determine what treatment would suffice to remove it.

Out of these experiments came "Chemical Cleaning," a chlorine treatment system that removes most of the black knot and bark seam dirt which passes through the flat screens. This is the third step in the Weyerhaeuser program, but it was essential that it be put in operation before the log barking and chipping.

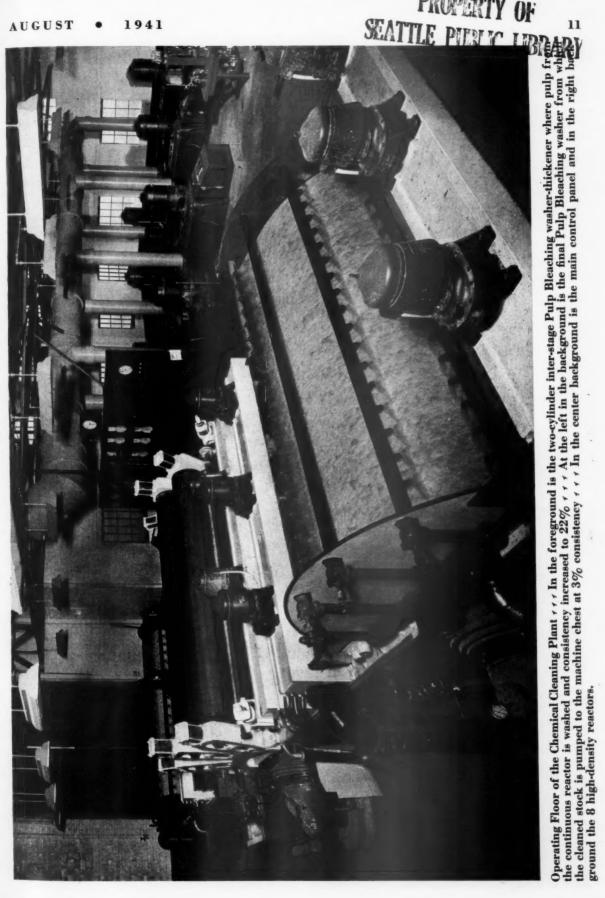
Summarizing the three steps in Weyerhaeuser's program for simplifying the production of unbleached sulphite and at the same time improving quality, we have:

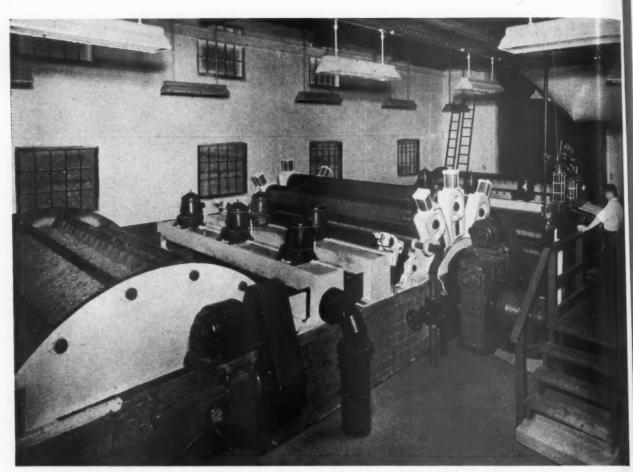
At the top, the five Vaughan deckers in the screen room, deckering screened stock before it is pumped to the chemical cleaning plant.

Below, the stock from the deckers enters the rotary absorber where it is thoroughly mixed with gaseous chlorine.

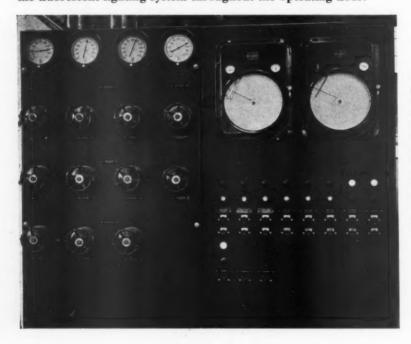
gd r. r.

r, hd





Another view of the washer-thickener and the final washer and at right the control platform showing the two rotameters, one metering the gasious chlorine to the continuous reactor and the other metering the hypochlorite liquor going to the showers after the inter-stage washer / / / A special feature is the vertical mixers for mixing stock with dilution white water, built by the Western Gear Works' associate plant in San Francisco, the Pacific Gear & Tool Works, for Pulp Bleaching Company 1 1 Note the fluorescent lighting system throughout the operating floor.



- 1. Hydraulic Log Barking
- Log Chipping
 Chemical Cleaning

The Chemical Cleaning Plant

• The principle of the plant is simple. Deckered, screened stock from storage at 3.5 per cent con-sistency, is pumped through a rotary absorber on the ground floor where rotating bars passing between stationary bars thoroughly mix it with the gaseous chlorine. It then passes into the bottom of the continuous reactor. In about 45 min-utes the stock works to the top (third floor) and is discharged into the two-cylinder inter-stage washerthickener where the pulp is washed

The small control panel includes The small control panel includes controls for chlorine cars, air supply, chlorine flow, hypochlor-ite liquor agitators, hypochlor-ite liquor ventilators, continuous reactor ventilator, air compressor and air supply to instruments.

AU and 22 pe

As thick adde wash shor stocl acto "Ch disc the tenc feat floo agit F

> av the th

is F on ma and the consistency is increased to 22 per cent.

As the stock leaves the washer-thickener, hypochlorite liquor is added through showers controlled by a recording Rotameter. The washer-thickener discharges to a short belt conveyor which carries the stock to the eight high density reactors. After this second step in "Chemical Cleaning," the stock is discharged through the bottom of the reactors at 2 per cent consistency into a tile lined double midfeather dilution chest on the ground floor, equipped with two Pulp Bleaching Company twin-propeller agitators.

From the dilution chest the stock is pumped back to the final washer on the third floor and then to the machine stock chest at 3 per cent consistency.

Cleanliness

• Special care has been taken to avoid contamination of the stock in the "Chemical Cleaning" plant through corrosion. All equipment in contact with the stock is stainless steel, rubber covered, tile lined or wood.

Control

• The screened and deckered stock is maintained at uniform consistency in the storage tank by a Bingham propeller type agitator. After leaving this tank and passing under the roadway the stock moves through a rubber lined Venturi tube assembly of Pulp Bleaching Company design before passing into the rotary absorber. The Venturi assembly acts on a conventional mercury type Bristol flow meter, the indications of which are electrically telemetered to the central control board. This instrument in turn controls the stock flow to a predetermined rate through Tork-Master operated Smith type stock valves, records the rate of flow, and integrates the accumulated total flow. Or, flow control can be taken over to manual operations at any time by means of selector switches on the control board.

Liquid chlorine is vaporized to a gas of constant temperature and pressure in a Pulp Bleaching Company vaporizing unit, and the design provides for controlling, recording and integrating the chlorine flow by an electrically operated instrument at the central panel board in a similar manner to the stock flow.

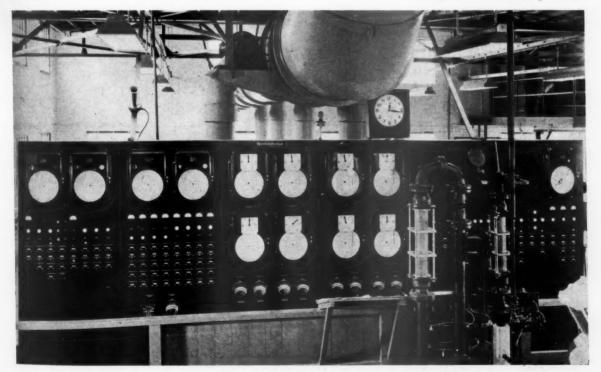
Chlorine is added to the stock in a Pulp Bleaching Company rotary absorber and delivered to the vertical continuous reactor. The mechanism of the reactor gives a periodic blending and redistribution to the stock and provides uniform displacement throughout the cell which is 16 feet in diameter and 46 feet in height.

All equipment handling the flow of stock and white water is electrically interlocked in two sequences. The first starts with the belt conveyor to the high density reactors and works back through the two-cylinder inter-stage washer-thickener ending with the pump furnishing stock to the rotary absorber. The chlorine flow to the continuons reactor automatically shuts off when

this sequence is stopped.

The second sequence starts with the pulp supplying stock to the machine chest and works back through the pumps supplying stock to the third washer from the dilution chest.

Electrically operated valves, 32 of them, driven by Tork-Master electric valve actuating units made by the Vaughan Motor Company of Portland, are used throughout the plant. These are operated from the centrally located control panel on



Control of the several steps in the chemical cleaning plant is centralized for convenience on this main panel assembled by Westinghouse in Seattle for the Pulp Bleaching Company / / In addition to the main bank of instruments described in the article the panel holds the electrical controls for all motors and the 32 Tork-Master electric valve actuating units / / In the right foreground is the chlorine control panel with rotameters.



The eight Pulp Bleaching Company high-density reactors of the second stage are driven by vertical gear units of PBC design built by the Western Gear Works of Seattle.

the top or operating floor. This arrangement allows for automatic cycling of the high density reactors.

These reactors are on semi-automatic operation. When a high density reactor cell is filled and an audible signal is sounded the operator changes the gate on the belt conveyor to the next reactor and pushes the button starting the cycle. At the end of the predetermined time the water valve and the dump valve are automatically opened and white water from the machine pit (stored in the tank on top of the continuous reactor) admitted for a fixed time. After time delay the water valve closes, followed by the dump valve. The relay system then resets for the next cycle.

All major electrical starting equipment is standard. The motor operated valves, the pumps, belt conveyor and high density reactors, are controlled from the central panel board.

The Washers

• The two-cylinder inter-stage washer-thickener mechanically mixes the stock from the continuous reactor with dilution water at system rate of flow; extracts the resultant liquor on a primary washing cylinder; washes by displacement showers; repulps and redilutes the stock with mechanical agitation in two suc-

cessive diffusion chambers; extracts the resultant liquor on a second cylinder; dewaters to a consistency of 22 per cent air dry by means of four pneumatically controlled pressure rolls; and shreds the high consistency cake for delivery by belt conveyor to the high density reactors.

Both of the cylinders on this Pulp Bleaching Company washer-thickener are of double valve construction with a very high hydraulic capacity and the entire production goes over each cylinder. Special features are the 8 vertical mixers, 3 preceeding and 5 following the first cylinder; the 4 pneumatically operated press rolls with pressures individually controlled from the panel; and the flatflow low pressure showers which are shown in the photographs giving practically perfect water distribution

The final washer receives the stock from the bellmer after high density treatment at the system rate of flow; mechanically mixes it with dilution white water; extracts the resultant liquor mixes it with dilution white water; extracts the resultant liquor on a washing cylinder; washes by displacement showers; repulps and redilutes the stock for delivery at approximately 3 per cent consistency to the machine stock storage chest.

Instruments

• Recording or recording controlling instruments have been provided for all important points in the proc-

Liquid level gages operate on the the screened stock storage tank, the dilution chest after the high density cells, the white water tank, the high density reactor cells and the machine chest. These are all Bristol bubbler type liquid level recorders.

Measuring instruments include a Bristol integrating, recording, controlling electric flow meter of the Venturi type measuring incoming screened stock to the rotary absorbers. The chlorine flow to the continuous reactor is measured in the gaseous state by a Leeds & Northrup flow recorder responsive to a Fischer & Porter rotameter.

Hypochlorite liquor going to the showers after the inter-stage washerthickener is measured by a Leeds & Northrup flow recorder responsive to another Fischer & Porter rotameter.

Dilution water for the hypochlorite liquor is measured by a Bristol flow meter.

Temperature indicators and controls include Bristol Pyromaster Potentiometer resistance thermometer indicating recorders on each of the eight high density recator cells; a Taylor Fulscope controller controlling the temperature of the hot water from the indirect steam tubular hot water heater supplying the showers on the second stage of the washerthickener. The temperature and pressure of the chlorine flowing to the continuous reactor are controlled by a Bristol free vane, twopen, air operated recorder-controller.

The chlorine control panel on the operating floor contains the rotameter for measuring gaseous chlorine going into the continuous reactor; controls for the hypochlorite liquor making; controls for switching chlorine cars with no loss of time and air controls for purging all chlorine lines.

Liquor Making

• Lime is unloaded in bulk directly from cars by a Fuller Airveyor and taken by suction into the steel storage tank outside the building. This equipment shows in the exterior photograph. The lime storage tank holds five cars of lime.

From storage the lime is drawn by a controlled screw conveyor to a

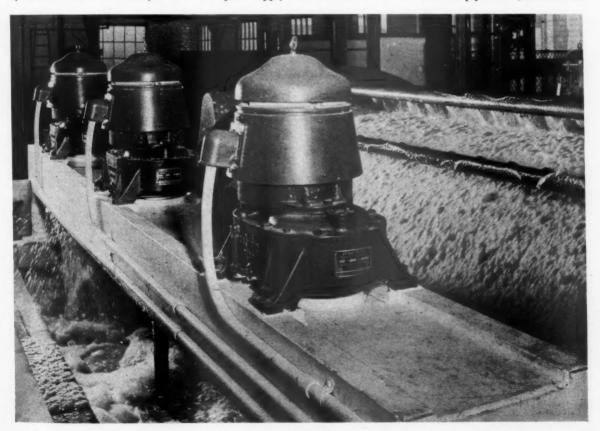
Dorr continuous slaker and classifier. The solution is then pumped to a steel milk of lime storage tank and circulated continuously over hypochlorite liquor making cells and drawn off as required.

Heating and Ventilating

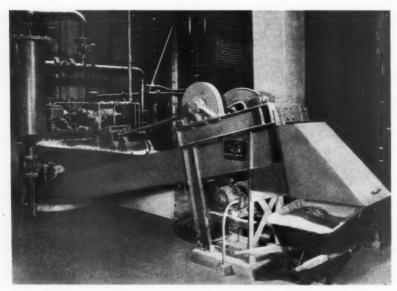
• The ventilation for the chemical cleaning plant was furnished by Drew & Hoffman, Railway Exchange Building, Portland, Oregon. The supply system, which is very simple in design, has no distribution ductwork due to the comparatively large volume of air that had to be introduced to compensate for that leaving the room through the exhaust systems. The supply unit consists of an axial flow type fan drawing outside air through standard fin type steam radiation and an American Air Filter Company's Automatic type filter, purchased by Drew & Hoffman through R. E. Chase & Co., Tacoma. This air filter, which is of the oil impingement type, is self-cleaning. It requires the minimum of attention, yet retains its high filtering efficiency at all times and permanently. This complete supply unit is mounted on a mezzanine platform in a corner of the room and thus saves valuable floor space.

A single fan and a system of Transite pipe exhaust from the eight bleach cells. Smaller individual fans exhaust from each of the bleach liquor tanks and the direct chlorinating tower. All of these units are unique in that all metallic parts exposed to the corrosive vapors are rubber covered. The housings are made of long-lived Transite pipe. The large fan which exhausts from the eight bleach tanks is driven by a V-belt drive, and both the bearings and the drive are encased in a steel housing whose outer surfaces are protected from corrosion by rubber covering. The interior of this housing is kept fresh and dry by the circulation through it of a supply of

The exhaust fans for the bleach liquor making tanks and the direct chlorinating tower connect into the top of the cells and exhaust the vapors horizontally through Transite pipes concreted into the building wall. Each unit is built into a 90° Transite pipe elbow, and the fan



Three of the PBC vertical mixers mixing dilution white water with the stock on the inter-stage washer-thickener / / Built by Western Gear Works' associate plant in San Francisco, the Pacific Gear & Tool Works,



The Dorr continuous lime slaker and classifier.

wheel is mounted on a shaft carried in ball bearings and direct connected through a flexible coupling to a totally enclosed motor carried on a steel plate bracket located outside of the vapor stream. In these units as with the larger fan unit the inside bearing is mounted in a vapor-proof housing which is supported by a spider bolted to the Transite elbow. All internal metal parts of this unit exposed to the vapors are covered with rubber. The entire elbow unit is connected to the adjacent ductwork by rubber covered steel bands located at each end of the elbow.

Care has been taken in the design of all the units to make ac-

cessible those parts requiring periodic inspection.

Air Systems

• The "Chemical Cleaning" plant is equipped with three air systems; one for the instruments, a second for chlorine unloading and a third for washer press rolls. The latter can be switched over onto the chlorine system if required.

Water System

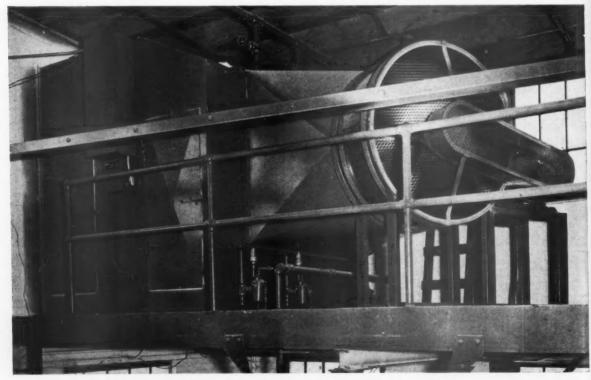
Some 4,750,000 gallons of water are required in the "Chemical Cleaning" plant every 24 hours on a 250 tons per day basis.

White water from the drying machine pit is stored in the wood tank on top of the continuous reactor (see exterior picture) and weighs 225 tons when filled. The white water is used first on the final washer, then in the second stage of the washer-thickener and finally in the first stage before going to the sewer.

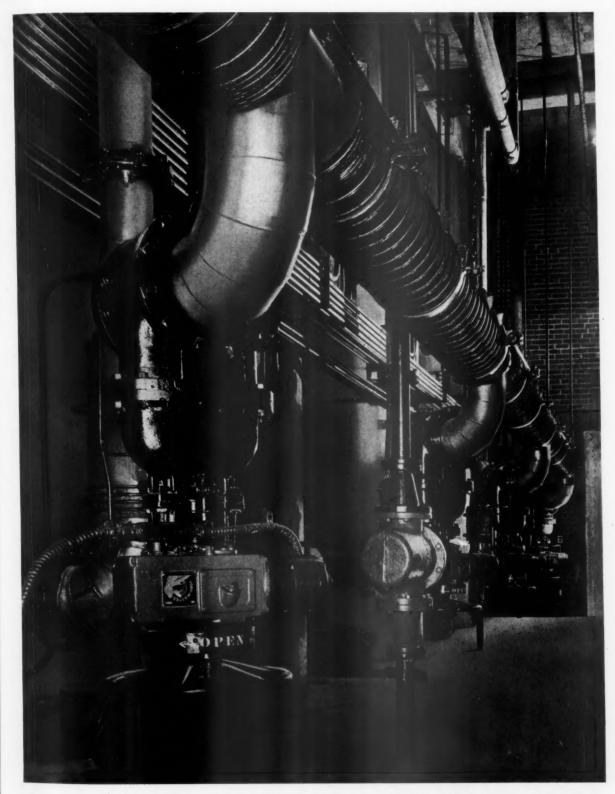
Equipment

● The major part of the equipment for the new "Chemical Cleaning" plant was supplied by the Pulp Bleaching Company of Wausau, Wisconsin. It included the following:

Pulp metering unit; rotary chlo-



The Drew & Hoffman air supply unit located on a balcony of the operating floor, draws outside air through standard fin type steam radiators and an American automatic air filter for This supply unit replaces air leaving the room through the exhaust systems.



Here are seven of the thirty-two Vaughan Motor Company Tork-Master electric valve actuating units supplied through Pulp Bleaching Company which facilitate the automatic cycling of the high-density reactors 1 1 1 Stock and white water lines are kept clean by the use of Douglas fir piping and welded stainless steel elbows and fittings.

rine absorber; continuous reactor; two - cylinder inter - stage washerthickener; 8 high density batch reactors; 2 twin - propeller dilution chest agitators; final washer; centralized-control assembly; and chemical preparing and measuring equipment

The equipment included under the last heading provided for unloading liquid chlorine from tank cars by superimposed dried air pressure; distribution of the liquid chlorine to chlorination and bleach liquor making; vaporizing chlorine for the continuous reactor stage; and the making and application of hypochlorite liquor.

The Western Gear Works of Seattle manufactured the high density reactors with drive gears and agitators for the dilution chest for the Pulp Bleaching Company. In addition the Western Gear Works supplied all the other gear drives in the

new plant. The Bingham Pump Company of Portland supplied the propeller type agitators for the screened stock storage tank and ten stock and water

The thirty-two Tork-Master elec-

tric valve actuating units were manufactured by the Vaughan Motor Company of Portland, and supplied through the Pulp Bleaching Company. Vaughan also manufactured the five new deckers, deckering the stock ahead of the storage tank.

Stock valves are largely of the Smith type and were supplied by Ray Smythe of Portland. Dump valves were furnished by the Pulp Bleaching Company and the Vaughan Motor Company. Chlorine valves were provided by Vaughan and the Crane Company. The latter supplied the water valves.

The welded stainless steel elbows, fittings and pipe together with the small copper water lines were manufactured by the Alaskan Copper Works of Seattle.

The Douglas fir white water tank and all the wood pipe in the plant were produced and erected by the National Tank & Pipe Company of Portland.

The transformers and motors were furnished by the General Electric Company and all electric controls and the panel boards were produced by the Westinghouse Electric & Manufacturing Company. Westinghouse manufactured the control panels in their Seattle shops for the Pulp Bleaching Company.

The Dorr Company supplied the lime slaker and classifier. The James Brinkley Company of Seattle manufactured the screw conveyors and furnished the belt conveyor. Steel tanks were furnished by the Seattle Boiler Works.

to

pe

lui

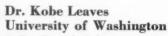
iz

ca

The Stebbins Engineering Corporation of Seattle tile lined the continuous reactor, the 8 high density reactors, the washer vats and the dilution chest.

Design and Supervision

• The "Chemical Cleaning" plant was designed by and constructed under the supervision of Otto C. Schoenwerk of Chicago, consulting engineer for the Pulp Division, Weyerhaeuser Timber Company. D. K. Macbain, plant engineer of the Longview Mill, was in charge of construction, assisted by L. M. Johnson, engineer on the staff at the Everett Mill. The electrical work was laid out by Ed Norton, chief electrician for the Everett Mill, under the direction of Mr. Schoen-



• Dr. Kenneth Kobe, associate professor of chemical engineering at the University of Washington, has resigned and is leaving August 1st for Austin, Texas, to assume new duties as professor of chemical engineering at the University of Texas.

After obtaining his doctorate at the University of Minnesota in 1930, Dr. Kobe had a year of industrial experience before joining the staff at the University of Washington. While at the Seattle institution he has been active in pulping experiments, his interest being principally in waste disposal and by-products.

With L. C. Haffner Dr. Kobe developed a sodium sulphite pulping process for Douglas fir, and a paper covering this work was presented last August be-fore the Fall Meeting of TAPPI in Seattle.

While at Washington Dr. Kobe published over 80 papers. He holds patents on the recovery of manganese, the recovery of sodium sulphate from natural salts, on submerged combustion equip-ment and on tear gas.

Dr. Pearl Joins Institute Staff

• Dr. Irwin A. Pearl, who has been doing research work on lignin in collaboration with Dr. H. K. Benson, executive officer of the Department of Chemistry and Chemical Engineering, University of Washington, left Seattle early in July for Appleton, Wisconsin.

Dr. Pearl has been appointed a research associate by the Institute of Parachemistry in Appleton

per Chemistry in Appleton.



One of the Bingham vertical type stock pumps employed in the chemical cleaning plant.

Y

cs

r.

g

B. C. Pulpwood Exports To Japan Stopped

• Freezing of Japanese credits in Can-ada and various other measures designed to paralyze business between the two countries has finally brought about 100 per cent elimination of hemlock and bal-sam pulpwood exports from British Columbia to the Orient.

The trade is still subject to license, and if the Canadian government wishes to resume shipments to Japan it may author-ize exporters to make shipments, but the case of the Florida Maru appears to have set a precedent, and the established official policy of Canada is apparently to discontinue pulpwood exports.

The Florida Maru sailed from Vancouver July 27th after loading only one-half its scheduled cargo of logs. Col. Nelson Spencer, for many years a leading figure in exports to Japan, made repeated ef-forts to have the full cargo released, but his pleas were ineffective.

Col. Spencer estimated the value of the pulpwood exports from British Columbia to Japan in recent years at \$600,-000 annually. If there had been no arbitrary curtailment, about 40,000,000 feet of logs would have been shipped this vear.

Nippon Soda Company, of which Port McNeil Trading Company is a subsidiary, has been the chief purchaser. Hoquetsi Pulp Company has also been a factor.

Port McNeil Trading Company, owning about 600,000,000 feet of standing timber in northern Vancouver Island, has been logging with a white crew for the past two years and some of its logs have been shipped through the Nelson Spencer organization or disposed of in the open market in Vancouver.

The Mitsui interests owned timber in the Cowichan Lake district of Vancouver Island and operated a logging camp for a while, but they have been inactive re-The Hoquetsi interests and Canadian Lumber Company (Japanese controlled) also have timber interests on Vancouver Island. T. Fukugawa of Vancouver owns some spruce timber on the Queen Charlotte Islands, but this is being cut chiefly for Canadian aircraft manufacture. Fukugawa is a naturalized Canadian.

Value of logs exported to all countries from British Columbia last year was \$2,-684,000, compared with a ten-year average of \$2,728,000, but provincial statistics do not deal with pulp logs separately and a large percentage of the total given represents Douglas fir.

Australian Papers Further Reduce Size

• Effective July 1, Australian papers further reduced their size, resulting in additional curtailment of newsprint requirements from overseas.

Voluntary rationing, now operating, saved 33 per cent on newsprint consumption during the year, compared with two years ago. Additional restrictions will save 36,000 to 45,000 tons of newsprint a year which, added to the existing cur-tailment, will save a maximum of 103,000

tons annually.

This, in effect, means that Australian publishers have reduced their consumption of newsprint paper by about 50 per cent since the outbreak of war.

Puget Sound Shows Improved 6 Months Report

 Puget Sound Pulp & Timber Co. re-ports net profit of \$578,305 for the six months ended June 30, 1941, after all charges, including depreciation, depletion, amortization, interest, and \$867,455 provision for federal income and excess profits taxes. This is equal to \$1.67 a share on the common stock after regu-lar preferred dividends and compares with net profit of \$433,433 for the cor-responding period of 1940 after provision for federal taxes of \$354,627 to \$1.18 on the common after preferred dividends.

Sales were 64,468 tons in the first half of the current year, against 66,755 tons in the like period of 1940, and amounted to \$3,659,436 in the first half of 1941, compared with \$2,916,274 in the like 1940 period. Production totaled 63,475

tons, against 66,312 tons.

For the three months ended June 30, last, net profit after provision for esti-mated federal income and excess profits taxes amounted to \$315,163, or 96 cents on the common compared with \$263,142 or 71 cents a common share in the first quarter and \$253,123 or 61 cents a common share in the second quarter of 1940. The company originally reported net profit of \$318,834 for the first quarter of this year, subsequently reducing computations to \$263,142.

Provision has been made for federal taxes at the rate of 60% of taxable income and applied to operating profit after depreciation for the first six months of 1941, replacing the 51% charge provisionally made in the first quarter and 45% charged in 1940. Management of Puget Sound expressed the opinion that a tax levy of 60% of taxable income is the minimum to be expected and stated that the rate may be higher.

Net sales for the second quarter of 1941 were \$2,058,768, compared with \$1,600,668 for the preceding quarter and \$1,600,163 in the second quarter of 1940. Production of unbleached sulphite pulp in the company's Bellingham mill reached an all-time high of 36,975 tons in the second quarter of 1941, compared with 33,429 tons representing the combined production of the Bellingham and Anacorres mills in the second quarter of 1940.

Balance sheet as of June 30, last, shows current assets of \$2,539,832 and current liabilities of \$1,585,988, leaving working capital of \$963,844, and a current ratio of 1.6 to 1. A year earlier current assets were \$1,351,494 and current liabilities totaled \$980,932, leaving working capital of \$370,562 and a current ratio of 1.38 to 1.

In a bulletin sent to stockholders the company said in part:

• "Operation of new plant facilities in the second quarter of 1941 resulted in a production increase of 40 per cent over the first quarter, and 11 per cent inthe first quarter, and 11 per cent in-crease over the combined Bellingham and Anacortes output in the second quarter

"Comparative production records: Second quarter, 1941, 36,975 tons; first quarter, 1941, 26,500 tons; second quarter, 1940, 33,429 tons."

A chart is reproduced in the report showing the comparative monthly production of the Bellingham and Anacortes mills in the first six months of 1940 as compared with the Bellingham mill alone The Bellingham mill surpassed the 1940 combined production in April of this year with the completion of the new addition to Mill B.

"Most accurate gauge of production performance is average daily output," states the report. "At the Bellingham mill in 1940 and through February, 1941, daiy production by months averaged be-tween 270 and 283 tons. Operation of the new addition in the last half of March, 1941, brought that month's average daily output up to 3241/2 tons. Daily averages in the second quarter of 1941 were: April, 396 tons; May, 411 tons; June, 412 tons. The third digester of the new manufacturing unit is ex-pected to commence operating about August 1st. This should raise average daily plant output to 460 tons and register further improvement in all operating results in the third quarter .-

Earlier forecasts of a pulp shortage now appear to be approaching reality, not only in unbleached sulphite (the grade made by the Company) but in other grades as well.

"Wood pulp in storage in the United States (all grades) declined from 325,000 tons in March, 1940, to about 80,000 tons on June, 1941. At the previous low point, reached in 1939, pulp in storage to only 215,00 tons .-

"Notwithstanding the tight supply situation, the domestic contract price of \$63.50 a ton for unbleached sulphite pulp was renewed for the third quarter of 1941. About 30 per cent of the Company's production is for export, largely Great Britain and Latin America, at prices \$8 to \$10 a ton higher than the domestic contract price.

Weyerhaeuser Places New Accumulator in Operation

• The new 20x52 vertical steel low pressure acid accumulator installed by the Longview Mill, Pulp Division, Weyerhaeuser Timber Company, was placed in operation July 21st. It was lined by Stebbins Engineering Corporation of Se-

The new accumulator replaces some wooden tanks, increases acid storage ca-pacity and provides better control of

Kenneth Gordon Named Traffic Manager

Kenneth Gordon was made traffic manager of Pacific Paperboard Company, Longview, Washington, effective July 1st. He was formerly shipping clerk at this plant.

Herb In Wisconsin

• J. J. Herb, president of the Pacific Coast Paper Mills of Bellingham and the Westminster Paper Mills of New West-minster, B. C., is enjoying an extended visit with friends and relatives in Wis-

Camas Paper Festival Draws 10,000 Persons

Louis Bloch Ball Park dedicated as gift to the citizens of Camas by the Crown Zellerbach Corporation

● Three days of festivity at Camas, Washington, on July 24th, 25th and 26th, marked the second annual Camas Paper Festival and was attended by an estimated 10,000 persons.

The festival was organized by Camas citizens as a result of the success of the first open house held by Crown Willamette Paper Company, Division of Crown Zellerbach Corporation. In 1939 the company held its first open house so the families and friends of employees might become acquainted with the manufacture of pulp and paper in "The World's Largest Specialty Paper Mill." This opportunity to see the mill was so well received by the local citizens and so many out-oftown visitors attended, that an annual paper festival was inaugurated last summer by Camas business men

to tie in with the mill open house.

Official opening of the recent festival was the coronation of June Cox as Queen of the Paper Festival, and the presentation of her court consisting of Miss Winifred Smith, crown princess; Princess Mary Province; Princess Frances Province, and Princess Leah Parsons. Miss Cox was sponsored by the Paper Makers' Union

Mayor H. J. Woodworth crowned Queen June at the coronation exercises held July 24th on the high school athletic field immediately following the service pin dinner. The evening concluded with the Queen's Ball in the high school gymnasium.

Coronation of Junior King "Wimpy" Fletcher and Junior Queen Sally Dobbs opened the Friday morning program. This was followed by the junior festival parade on the downtown streets of Camas. Other events of the morning included a band concert at the Louis Bloch ball park and airplane maneuvers by twelve army pursuit planes from the Columbia air base at Portland. ing act

for

Park Dedicated

• In the afternoon the Louis Bloch Park was dedicated, with Franklin T. Griffith, chairman of the board of Portland General Electric Company, giving the main address. Louis Bloch, chairman of the board of Crown Zellerbach Corporation, and guest of honor, expressed his appreciation of the honor bestowed on him by giving his name to the park. Frank B. Collins, Camas postmaster, was master of ceremonies and general chairman of the Paper Festival. He expressed official thanks to Crown Zellerbach Corporation for present-



The dedication of LOUIS BLOCH PARK was a highlight of the Camas Paper Festival 1 1 1 Left to right is LOUIS BLOCH, Queen JUNE COX and FRANKLIN T. GRIFFITH, Chairman of the Portland General Electric Company, who gave the main address at the dedication.

The inscription on the plaque reads, "LOUIS BLOCH PARK, A Gift to the City of Camas for the Enjoyment of Its Citizens by CROWN ZELLERBACH CORPORATION. Presented on September 3, 1940, by Louis Bloch, Chairman of the Board of the Corporation."

ing the park of more than three acres to the city of Camas last year. Mayor Woodworth awarded prizes to the children winning the contest for naming the two city parks. Crown Park is located on the heights north of the business district of Camas.

Visitors to Mill

• Visitors at the local mill of Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, totaled 894 persons on Friday and 1257 on Saturday, a grand total of 2,151. Elaborate guide service was provided at the plant for showing the visitors through the paper mill.

Other features of Friday's program included a soft-ball tournament and a dance at the new port dock on the shores of the Columbia

River.

One of the highlights of the festival was the main parade on Saturday morning. Paper in almost every conceivable form was displayed by the entrants. Sweepstakes award was won by Karnath's Grocery and Market for a float made of thousands of vari-colored paper napkins, which is said to have rivaled floats in the Portland Rose Festival parade, one of the largest on the Pacific Coast.

Northwestern Electric Company won first prize in the commercial and industrial division. Second place went to The Fashionette, whose entry was a paper yacht with three bathing beauties on the bow.

Camas Girl Mariners' ship "Seagull," with a blue and white float featuring paper birds, and an escort of uniformed mariners, placed first in the section for marching units

with floats.

First prize for organizations went to the Knights of Pythias whose float was a replica of the Knights of Pythias' home. St. Helens, Oregon, Sylvanettes, a women's marching unit, took first place in their division; the Washougal drum and bugle corps, second; and the Camas band, third.

The Crown Zellerbach Corporation float entered in the non-competitive division, was the most elaborate display of the festival. It featured a revolving globe bearing the slogan "Camas Paper Wraps the World." Miss Marjorie Temple, Theme Girl, occupied a throne on the float

Golf Tournaments

• Two golf tournaments of the paper industry's men were played on Saturday at the Orchard Hills



A revolving globe inscribed, "Camas Paper Wraps the World," topped the elaborate float of the Crown Zellerbach Corporation in the Camas Paper Festival Parade.

course. The Western Wax four- of 65. Other entrants and their some of North Portland won with a net score of 278. Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, West Linn, Oregon, placed second with a net of 279 strokes. Other teams playing in the tournament were Hawley Pulp and Paper Company, Oregon City, Oregon; Long-view Mill, Pulp Division Weyerhaeuser Timber Company, Long-view, Washington; Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, Camas; and the Portland office of Crown Zellerbach Corporation.

In the managers' tournament, Frank Sullivan, manager's assistant of Crown Willamette Paper Company at Camas, won first with a net

ores are.			
Donald,	Western	Wax	67
Charters,	Camas		72
Defieux,	Camas		72
Ostenson,	Camas		73
Dilling, V	Western	Wax	75
Olsen, Ca	mas		76

Mr. Ashe of Western Wax was medalist winner with a score of 68, and Mr. Sharbach of West Linn was runner-up. Keith Aslin's holein-one on the third highlighted the tournament.

Fifteen hundred spectators attended the outboard regatta held during the afternoon on the Columbia, off the new port dock. Ed Barthelmy, a local entrant, captured the C service event.

The closing festivities included a



The Printing Pressmen's Local No. 349 entered a float of printed wrapping papers and bags.

modern dance at the Port Dock, and an old time dance at the I.O.O.F. hall.

Local business people of Camas cooperated with the festival committee and decorated nearly every store in town with a paper window display. Crown Willamette Paper Company's display in The Fashionette included paper products of most every sort.

St. Regis Restates Its Investments

● Roy K. Ferguson, president, announced that at a special meeting of stockholders of the St. Regis Paper Company held recently at the office of the Company, Watertown, New York, the stockholders approved the recommendation of the board of directors of the company with respect to the restatement of certain investments of the company on the books of the company effective as of January 1, 1941. The investments of the company restated on its books by this action are:

(1) 1,341,666 sh. Common Stock of The United Corporation restated at \$1,845,000 which had been carried on the books of the Company at a valuation of \$16.553,503.93.

(2) 230,000 sh. Common Stock of Taggart Corporation restated at \$1,295,000 which had been carried on the books at a valuation of \$5,642,843.97.

(3) 3,600 sh. Common Stock. 4,056 sh. "B" Preferred Stock of Carthage National Exchange Bank restated at \$1.00 which had been carried at a valuation of \$220,560.

The aggregate restated amount of the foregoing investments is \$3,140,001.00 against the company's valuation at December 31, 1940, of \$22,416,907.90.

In restating the value of the foregoing investments and thereby absorbing the depreciation recognized on the books of the company amounting to \$19,276,906.90, the full amount of the company's earned surplus (corporate not consolidated) at January 1, 1941, amounting to \$2,330,582.94, is eliminated and the balance is a charge against capital surplus.

The president said at the meeting that the restatement of these investments of the company aids in preparing the way for a resumption of dividends on the preferred and common stocks of the company in the future. He indicated, however, that a definite date for the resumption of dividends on the company's preferred or common stocks could not be predicted at this time or any definite plan be submitted to the stockholders yet for the adjustment or discharge of the accumulated arrears on the company's preferred stock.

Mr. Ferguson also presented comparative consolidated net earnings of the company and subsidiaries for the six months ended June 30, 1941, amounting to \$1,886,743.76 against \$1,082,125.39 for the same period last year. In the above figures for 1941 the company has reserved for Federal Income Taxes at the rate of thirty per cent and the figures are subject to the year end audit.

Mr. Ferguson further stated that all plants in operation are running at full capacity and the business outlook for the remainder of the year appears favorable.

"Smiley" Williams Retires After 41 Years With Crown

· George "Smiley" Williams retired from the employ of Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, on August 1st, after 41 years of service with the company and its predecessor company Willamette Pulp and Paper Company at West Linn, Oregon. It was here Smiley got his start in the paper industry on July 20th in the year 1900, as a general utility man. He was moved around until he was working in the beater room, where he has worked ever since, in one capacity or another. A few years later, September first, 1903, he transferred to the Camas mill of Crown Willamette Paper Company, from which he recently retired as beater engineer, at the age of 71 years.

Special honors were bestowed on Smiley at the recent Service Pin dinner at Camas, Washington, where it was announced that he was to retire on the first of August, and he was accorded a place at the head table with the presiding officials of the company and visiting dignitaries. When Toastmaster W. D. "Billy" Welsh presented Smiley Williams at the dinner and called on him to say a few words, he responded by telling of The Reversal of Human Attitudes.

He told how the workman injured, not many years ago, would have to walk or limp home from the job or on a stretcher if necessary. Nobody was particularly concerned.

GEORGE "SMILEY" WILLIAMS Retires after 41 Years

Now the employers take care of the injured as well as the working. He says, "This has been a remarkable change in the industrial attitude in this short span of forty-one years."

Louis Bloch, chairman of the Board of Directors, extended an invitation to Smiley to attend the ensuing Service Pin Dinners.

Prior to entering the pulp and paper field, Smiley had been a newspaper man. This experience was not neglected following his start in the paper industry. For thirteen years he worked on the company house organ, "Making Paper," handling the Camas section of the journal.

Replying to Pacific Pulp & Paper Industry's inquiry as to what he intends to do during his leisure hours which were formerly spent working at the mill, Smiley said, "The Italians have an expression for it, dolce far ni-ente, which means 'sweet doing nothing.'"

In recognition of general fellowship and forty-one years of service, fellow workers presented Smiley with a radio to enjoy during his newly acquired leisure. The foremen's club gave him a watch. He also received a "broken-down alarm clock" as a memento of those days when he heeded such signals.

Homer Best Flys East Drives West

• Homer H. Best, machine tender, Longview Mill, Pulp Division, Weyerhaeuser Timber Company, Longview, started on his two weeks vacation July 24th when he boarded a plane for the East to pick up a new car and drive it back to Longview.

War's Effect on One Swedish Paper Mill

The isolation of Sweden by the European war has caused the development of new types of business for pulp and paper mills. The Swedish Wood Pulp Journal for June 15th says:

"The Waija sulphate mill is at present installing equipment for the manufacture of sacks for producer gas coal, cellulose cattle food and the like. One machine, which cuts out and fixes the sack bottoms, is already working, its maximum capacity being 50,000 sacks per day. Next to this machine a printing press will be mounted to print the text on the sacks, which so far has been done by hand. The new machine will handle about 60,000 sacks per day.

000 sacks per day.
"To supply better raw material for the sacks, one of the paper machines is now being altered to produce a special paper of considerably higher quality."

Tax Records **Become Roofing Paper**

 Six tons of obsolete tax records were delivered late in July to the J. E. Berk-heimer Company of Tacoma, manufacturers of roofing papers. More tonnage

Under authority of a law enacted by the last Washington legislature, the country treasurers are authorized to destroy old tax records under the supervision of the county auditors and a state examiner. The law provides that the records be de-The law provides that the records be destroyed by fire, but Pierce County treasurer Paul Newman requested authority from the state to sell the records in view of the imminent shortage of waste paper.

This authority was granted as none of the papers were of a confidential nature. It is hoped that other counties will find it possible to dispose of their old records in this manner thereby providing excel-lent raw material for roofing and for

board production.

Sulphur Now Coming By Rail

· Sulphur for the pulp and paper mills near Portland is now being shipped from Texas by rail.

Two boats belonging to Union Sulphur Company, Inc., were recently taken from service supplying sulphur to Portland and vicinity. These are the W. R. Keever, 7800 gross tons, and the Herman F. Whiton of 7600 gross tons.

In Portland sulphur is transferred from rail cars to barges for delivery to Crown Willamette Paper Company mills at Camas, Washington, and West Linn, Oregon.

Nickles Vacations

· Austin Nickles, general superintendent, Hawley Pulp & Paper Company, Oregon City, Oregon, vacationed the last two weeks in July at the Oregon beaches with Mrs. Nickles and son Albert.

Interesting Facts About Rayon Staple Fiber

• Staple fiber, or spun rayon, as it is sometimes called, is produced from the same raw materials and by the same

chemical process as rayon filament yarn.
Staple fiber is made by cutting rayon strands or filaments into short, uniform lengths—as short as cotton fibers or as long as wool fibers. These short fibers are then spun into yarn on textile spin-ning machinery in the same manner as cotton or wool.

The versatility of rayon staple fiber has materially broadened the textile field. Blended with other fibers, novel and varied effects are achieved, chiefly because different fibers have different dyeing qualities, degrees of luster, softness, etc. Staple fiber takes rich dyes, and prints in clean-cut brilliant colors.

There are various methods used for combining spun rayon with other fibers, such as wool, cotton, silk, linen or mo-hair. In some cases they are blended in the raw stock during carding or combing prior to the process of spinning, and in others the finished yarns of several different fibers are twisted together. Different yarns can also be combined in the knityarns can also be combined in the knit-ting and weaving process, achieving un-expectedly beautiful two-toned effects.

Spun rayon mixed with wool is being used in increasing volume in men's and

boys' clothing fabrics, in floor coverings,

blankets, etc.

Originally Developed in Europe

 Staple fiber development began in Europe during the last World War due to a shortage of natural fibers such as

cotton and wool.

It was not until 1928, however, that commercial production began in the United States. Today it is an established branch of the rayon industry, as illustrated by the fact that only 165,000 pounds of staple fiber were produced in 1928. Ten years later production of this fiber increased to 51,300,000 pounds, and 1940 showed an increase in one year of 58%, or about 81,000,000 pounds.

In 1939 47,000,000 pounds of staple fiber were imported into the United States-almost as large a quantity as we

produced, while due to the European War, imports dropped off to approximately 18,000,000 pounds in 1940.

Rayon companies are expanding their capacity to meet the increasing demand for staple fiber, and it is expected that by the end of 1941, when present plant expansions, and new plants under construction are completed, approximately 125,000,000 pounds of staple fiber production capacity will be available. This will require about 60,000 tons of rayon pulp, exclusive of wood pulp require-ments for the manufacture of rayon fila-

More Camas Men Answer Call to Arms

 From late June to August 6th the fol-lowing employees of Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, were called for mili-

Ralph Strickler, clerk in the order department, now at Camp Callan, California; Eugene Brundage, of the yard, to Camp Roberts, California; Clifford Pratt, of the yard; Patrick I. Donnelly, woodmill, a naval reserve, now at the Bremerton navy yard on general detail; Clifford Woodman, wet room; Leo Mar-tin, laminator rewinder operator; Elmer Paris, yard; Robert Butler, wood mill; Delbert Bush, bag factory; Woodrow Olson, miscellaneous crew; and Albert Tews of miscellaneous crew.

I. A. Wilcox Vacations In California

 J. A. Wilcox, process engineer and a director of the Longview Fibre Company, Longview, Washington, left late in July for a two weeks vacation in California, accompanied by Mrs. Wilcox.

Mrs. Jackson Recovers From Illness

Mrs. Hattie Jackson, Camas plant nurse of Crown Willamette Paper Com-pany, was confined to the St. Joseph's hospital at Vancouver on July 30th with illness. She returned to work August

A Well Taken Point

• Under the heading, "Unnecessary Waste of Paper," the McMinnville, Oregon, Telephone-Register, published the following editorial on July 31st.

"Defense officials are already predicting a shortage of paper while governmental agencies go on expending the nation's paper stocks by the millions of pounds in useless and unproductive literature from bureau offices and in propaganda channels. Estimates place the government's use of paper at from eight to ten per cent of the nation's output- a really overwhelming total when one realizes that this is just one business in thousands drawing on paper supplies. It can be conceded that the government is the biggest business in the world, but its use of paper is almost criminally wasteful.

"Most people of the nation think little of the effect of paper upon their lives. Yet, this government waste is an essential pivot point for their daily existence. With governmental useage of paper increasing, price of paper goes up with the demand and resulting shortage. Mills run far behind on commercial business orders to fill government requirements.

"Paper is the basis for our modern economic system. Everything we do in business, in sale of products, in food marketing, in every phase of our activity is tied in with use of paper. When paper shortage brings higher prices, these prices are added on to cost of capital and consumer goods.

The Bend, Oregon, Bulletin remarks that despite the fact that the Bend area has ceased cotton production to raise "bananas" the census bureau is still sending them preliminary reports on activity in the cotton industry. Those reports might be interesting some places -but not in eastern Oregon. This is just a very small example in the lack of planning in government agencies in the use of paper for nation-wide propaganda purposes. It is effecting the pocketbook of each of us needlessly-and we should demand moderation of the paper policy, just as we should demand moderation in many forms of undomestic spending."

Paper Mill Men's Club Holds Summer Party

• Plans for the big October 3rd Hi-Jinks were discussed at the July meeting of the Paper Mill Men's Club of Southern California when some 40 members met for golf and dinner at the Cheviot Hills Country Club in Los Angeles on the 24th.

With a golf tournament featuring the afternoon, the July session of the PMMC brought together a large dinner group to hear a "progress report" from Jerry Thiem, general chairman.

Thiem stated:

"The general committee has nothing but satisfaction to report."

His statement was backed up by George McNamara, assistant general chairman, together with the various committee chairmen: Art Fox, finance committee; Horace Gibson, charity tickets; Neil Sinclair, reservations; Ed N. Smith, entertainment; Verne Moore, softball; Jerry Madigan, director of activities; and Frank Philbrook, golf.

Scene of the big Hi-Jinks is to be Riviera Country Club, Los Angeles. The date, Friday, October 3rd, is being noted by all in the paper trades in the southern section of

California.

Although intimate details were not announced, word was released that at noon the golf tourney and the baseball game will be under way. Dinner is slated for 7 P.M., with an elaborate array of entertainers to follow.

Since there was no Del Monte session this year, the Paper Mill Men's Club Hi-Jinks probably will be the only jobbing get-together which may be participated in by

southwesterners.

Generally, an attendance of over 400 is on hand at the affair, the attedants comprising jobbers and millmen from Santa Barbara to San Diego. Invited to attend are executives and heads of purchasing departments of the paper jobbing trade. The Hi-Jinks is an "invitations only" party.

The jinks is followed at Christmas by the Paper Mill Men's Club's very worthy Christmas party for underprivileged children.

President Lester Remmers concluded the brief business portion of the session by announcing that the PMMC is now incorporated.

In attendance at the July progress session were:

President Lester Remmers, of Crown Willamette Paper Co.; vicepresident Paul Raab, of Crystal Paper Service; Charles Spies, Cupples Co.; George Weiman, Western Waxed Paper Co.; Al C. Hentschel, Johnson, Carvell & Murphy; treasurer A. A. Ernst, of Everett Pulp & Paper; Frank Philbrook, Graham Paper Co.; Neil B. Sinclair, Nashua Gummed & Coated Paper Co.; G. A. Thiem, Milwaukee Lace Paper Co.; M. M. Paup, Comfort Paper Co.; J. D. Maloney, Northern Paper Mills; W. A. McBride, Lily-Tulip Cup Corp.; R. F. Attridge, Johnson, Carvell & Murphy; Harry L. Fields, National Paper Products Sales Co.; N. A. Green, Crown Willamette Paper Co.; Marvin Vander-heiden, Nekoosa Edwards Paper Co.; E. J. La Vigne, Cupples Co.; J. W. Genuit, California Fruit Wrapping Mills; F. C. Van Amberg, Angeles Paper & Excelsior Prods. Co.; R. W. Colwell, Gilbert Paper

Andy Dean, Lily-Tulip Cup Corp.; Earle Wright, Lily-Tulip Cup Corp.; Hal Cassaday, Pacific Waxed Paper Co.; Louis T. Mork, United States Envelope Co.; Louis Wanka, Pacific Coast Paper Mills; Floyd Smith, Patterson Pacific Parchment Paper Co.; H. E. Gibson, Capital Envelope Co.; Jack R. Chancellor, Universal Paper Products; B. Bohnsen, California Cotton Mills; H. A. Swafford, Crown Willamette Paper Co.; Chet Gunther, Crown Willamette Paper Co.; Larry Zick, Menasha Products Co.; Charles Jones, Dobeckmun Co.:

Robert G. Marquis, Atlantic Gummed Paper Corp.; Roy J. Gute, Menasha Products Co.; Anthony Sheehan, Pacific Waxed Paper Co.; Garry Carlton, Johnson, Carvell & Murphy; Lou Levine, Crystal Paper Service; George McNamara, Capital Envelope Co.; Art Foxy Western Waxed Paper Co.; Jerry Madigan, Johnson, Carvell & Murphy; and Tom Rhodes, Pacific Pulp & Paper Industry.

President Remmers, and founding president Frank Philbrook, noting a transfer of the representatives of Pacific Pulp & Paper Industry, rose after introductions had been given from the floor, to state that they are on record as duly grateful to this publication and its former representative, Calvin D. Wood, for the editorial support given the PMMC in past years, and extending a warm welcome to Mr. Wood's successor, Tom Rhodes. Mr. Wood has been transferred to the Los Angeles harbor area where he now represents the marine publications of the same publishing organization.

Following dinner, the meeting adjourned to clubrooms for games and yarn-spinning. In the latter department of diversion, Tony Sheehan and Jerry Thiem tied for honors.

Blind bogey winners during the afternoon of golf were: Bill Colwell, 1st; F. C. Van Amberg, 2nd; Emil La Vigne, 3rd.

Shoemaker Visits Coast Pulp Mills

 William M. Shoemaker, secretary of the National Vulcanized Fibre Company, Wilmington, Delaware, arrived in Seattle August 7th on a two weeks' trip to visit a number of pulp mills in this region.

First on his schedule was a call at Rayonier Incorporated's dissolving pulp mill at Shelton, Washington. This was followed by a visit at the Everett Mill, Pulp Division, Weyerhaeuser Timber Company, and to several other plants in Washington.

AT THE PAPER MILL MEN'S CLUB SUMMER PARTY 1 1 1 No. 1, left to right, Treasurer ANSEL A. ERNST, founding President FRANK PHILBROOK, and President LESTER REMMERS 1 1 1 No. 2, MARVIN VANDERHEIDEN, HARRY L. FIELDS, BILL McBRIDE 1 1 1 No. 3, TONY SHEEHAN, GEORGE McNAMARA, JERRY THIEM 1 1 No. 4, HAL CASSADY, JERRY MADIGAN, LOUIS T. MORK1 1 No. 5, BILL McBRIDE, JACK CHANCELLOR, B. BOHNSEN 1 1 No. 6, LOUIS WANKA, FLOYD SMITH, HORAGE GIBSON.

No. 7, F. C. VAN AMBERG, ART FOX, NEWBY GREEN * * * * No. 8, PAUL RAAB, CHARLES JONES, RUSS ATTRIDGE * * * * No. 9, J. W. GENUIT, H. A. SWAFFORD, CHET GUNTHER * * * * No. 10, JOE MALONEY, MERLE PAUP, LARRY ZICK * * * * No. 11, LOU LEVINE, ANDY DEAN, EARLE WRIGHT * * * * No. 12, NEIL SINCLAIR, ROBERT MARQUIS, ROY GUTE * * * * No. 13, GARRY CARLTON.



e, y, se a-a, x, y r-

gg of se in your por ne ig cod in wish in . d. es e- e- or

ill ol-lp m-in

d-N, B.

T-E R,











Camas Converting Addition Completed

• The new converting plant addition of Crown Willamette Paper Company, Divi-Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, Camas, Washington, was finished as of August 4th, when paper products were begun to be moved in on the first fioor. This is a 110 by 120-ft. four-story building of reinforced concrete, increasing storage capacity by some 52,000

square feet.

th ZT pi

E

Puget Sound Men Prefer the Beaches

 Vacation time found several of the Puget Sound Pulp & Timber Company men enjoying trips to Northwest beaches.
 E. O. Ericsson, chief chemist selected Seaside, Oregon. Gordon Morseth, foreman spent two weeks on Hat Island near Everett, trying a control of the property trying and the property trying the season. Everett, trying to catch all the salmon in the bay, and Sid Collier, foreman, en-joyed the quiet of Vancouver Island with a few days in Victoria and at Qualicum Beach.

Tony Siebers Makes Flying Wisconsin Trip

• Anton P. Siebers, paper mill superintendent of the Longview Fibre Company, flew to Wisconsin July 23rd accompanied by his daughter Helen to visit Mr. Siebers' mother who was seriously ill. Her condition was greatly improved when they returned to Longview at the end of the month.

Low Water Shuts

Down Hawley Grinders

● The grinders of Mill "A," Hawley
Pulp & Paper Company, Oregon City,
Oregon, shut down early in July. These
grinders will not be operated until the
fall rains raise the water in the Willamette river, which provides power for
the grinders. the grinders.

The Fish Are In Horse Lake

• Catching the limit of fish every day was the experience of Joseph DeGrace, cook for the Puget Sound Pulp & Timber Company, while on a trip up the Cariboo Trail in British Columbia. After telling of his success, a general movement toward Horse Lake, B. C., was evident among those who heard Joe's story.

Seen by the camera of PACIFIC PULP & PAPER INDUSTRY at Paper Mill Men's golf tournament , , , At the top, left to right, MARVIN VANDER-HEIDEN, CHARLES SPIES, ANSEL A. ERNST and E. J. La VIGNE , , , Second from top, PAUL RAAB, R. F. AT-TRIDGE, W. A. McBRIDE and AL C. HENTSCHEL , , , Third from tep, F. C. VAN AMBERG, J. W. GENUIT, FRANK PHILBROOK, BILL COL-WELL.

Second from the bottom, ART FOX, HARRY L. FIELDS, N. A. GREEN and G. C. WEIMAN 7 7 Bottom picture, JERRY THIEM, J. D. MALONEY, MERLE M. PAUP and H. E. CIRSON GIBSON.

RY

n of

Divi-

were

story

reas-

the

hes.

near

mon enwith

cum

rin-

any,

Her

hen l of

ity,

ese

Wil.

for

day

ace,

the

ter

was be's

LP

lill

he

R-

A.

T-

C.

L

X, EN ic-

Isadore Zellerbach Dies in San Mateo

• Isadore Zellerbach, chairman of the executive committee of Crown Zellerbach Corporation, died Thursday, August 7th, at Mills Hospital in San Mateo, California. Memorial services were held at Temple Emanu-El in San Francisco at 5:30 p. m. on August 8th and interment was private.

In addition to his executive position in Crown Zellerbach Corporation, Mr. Zellerbach at the time of his death also held the following corporate positions: Chairman of the board of Zellerbach Paper Company; vice president and director of Rayonier Incorporated; director of Fibreboard Products, Inc.; vice president and director of California Cotton Mills; and vice president and director of National Automotive Fibres, Inc.

Mr. Zellerbach was a past president of the National Paper Trade Association and a member of the California Fish & Game Commission for 14 years.

• Isadore Zellerbach has passed on, and his thousands of friends, from the boot-black on the corner of Sansome and Clay to the presidents of great corporations, are conscious of the fact that the world has lost a fine man.

Isadore Zellerbach was a true California pioneer. Born at Moore Flats, in the Mother Lode country, he had little formal education, except that offered by the local grade school, and early in the 1870's he followed his father, Anthony Zellerbach, to San Francisco, where the elder Zellerbach had established himself on a small scale as a merchant of paper. Isadore Zellerbach did not immediately join his father, but spent several years, working and saving, and preparing himself to take an active part in the business.

When Isadore Zellerbach joined his father and brothers in the year 1888, business generally was not at its best, and the entire nation was nearing the panic of 1893, but from the very beginning of his association with the firm, Isadore was bent on increasing the stock of goods handled, and it is interesting to note that Isadore usually had his way.

Stocks were increased . . . greater varieties of paper were carried, the business gained, and Isadore Zellerbach became more and more of a

factor, not alone in the paper industry, but in the rapidly expanding civic and business life of San Francisco.

By April 17, 1906, A. Zellerbach & Sons literally sprawled over San Francisco's printing district, with their 18 offices, salesrooms, warehouses and lofts. By strange coincidence, it was on that day that they bought the Union Pulp and Paper Company, with an office in Oakland, and it was from that Oakland office that A. Zellerbach & Sons were doing business the day after the San Francisco Fire, which on April 18, 1906, destroyed sixteen of their warehouses. The seventeenth warehouse, at 405 Jackson Street, was completely watersoaked, but there was some undamaged stock in the warehouse at Sansome and Filbert Streets, and on April 22nd the Jackson Street warehouse was again serving San Francisco.

Events moved swiftly after the fire. Improvements in methods of printing were making heavy demands on the paper industry, and A. Zellerbach and Sons, through the farsightedness of Isadore, were working constantly to keep abreast of the times. In May, 1907, the old partnership among Anthony and his sons was dissolved to give place to the Zellerbach Paper Company, a corporation with a few employee stockholders in addition to the Zellerbach family.

One city after another on the Pacific Coast was added in the following years to the Divisions of the Zellerbach Paper Company, and Isadore Zellerbach was everywhere, not alone building business and good will for the company, but making personal friendships which were to endure throughout his life. Up to 1914 the company occupied itself exclusively with merchandising. Through the organization in that year of the National Paper Products Co. and later on of the Washington Pulp and Paper Corporation, the operations of the company were extended to the manufacture of towels and tissue, box board and news-

To simplify the business structure which had become cumbersome through the acquisition of manufacturing and power units, in 1924 the Zellerbach Corporation was organized with Isadore Zellerbach as President, and in 1928 it merged

with the Crown Willamette Paper Company interests and the Crown Zellerbach Corporation was formed, with Mr. Zellerbach continuing as president of the new corporation.

As he climbed the ladder of success, Isadore Zellerbach retained the homely human qualities that brought him the thing he prized above all else—the affection of his associates. Regardless of how large the organization grew, he referred to his employees constantly as his "business family" and there was no one whose position was so minor but what he could claim the boss' ear.

Unquestionably the happiest moment of Isadore Zellerbach's life was in 1938, when over six hundred of the corporation's employees in the Bay Area, met with him to celebrate his fifty years of service to the paper industry. It was a real "famil affair" with his sons, J. D. Zellerbach, now President of the Crown Zellerbach Corporation, and H. L. Zellerbach, President of the Zellerbach Paper Company, as well as his wife and his daughter, Mrs. A. B. Saroni, sharing his joy in the happy good-fellowship which made the occasion entirely different from the usual type of congratulatory dinner.

Isadore Zellerbach would not want to be remembered as a business tycoon. He would like better to be remembered for his fourteen years of service to the Fish and



ISADORE ZELLERBACH A life of usefulness.

Game Commission of California, for his interest in every type of civic affair, for his never failing sympathy, for his ready wit, for his tolerance, and for the fact that his door always swung open to a friend in trouble.

He has left those who knew him a rich heritage of splendid memories.

Dan Robbins Married In Bellingham

• Daniel Robbins of the engineering de-Daniel Robbins of the engineering de-partment, Puget Sound Pulp & Timber Company, Bellingham, was married in July to Miss June Knight, daughter of Mr. and Mrs. Allen Knight of Belling-

Mr. Robbins is the son of H. M. Robbins, vice-president of the Puget Sound Pulp & Timber Company.

Pacific Coast Paper Mills Holds Pienie

• The employees and the management of the Pacific Coast Paper Mills at Bellingham, Washington, participated in an all-day picnic at Birch Bay near Bellingham on August 9th. A variety of con-tests including a soft-ball game featured the day's sports. Prizes were offered by the company and by Local 409 of the International Brotherhood of Paper Makers.

The festivities were concluded with a dance at the Shore Pavilion.

Roger Egan On the Coast

Roger Egan of the Bulkley, Dunton Pulp Company, New York, arrived in Seattle the last of July for a visit of several eral weeks with executives of the several pulp mills represented by his company.

Camas Girls Vacation In Alaska

 Miss Joyce Smith, billing department, and Miss Louise Baxter, central labora-tory, Crown Willamette Paper Company, Division of Crown Zellerbach Corpora-tion, Camas, Washington, spent their annual two weeks' vacation in Alaska. They went as far north as Seward.

Paper Makers Hear **Diversified Program**

 "Important as labor is in papermaking, we have another essential item of manufacturing expense, and that is water; about 200 tons of it are used per ton of bleached sulphite; and it is also a very convenient item; when we cannot size the sheet, it's the water; when we cannot get the right shade, it's the water; and when we can't get the test, of course, it's the water. So it is only fitting that our first symposium be devoted to water.'

Thus Chairman Herman Joachim of the Papermakers and Associates of Southern California, introduced the general topic of the August 7th meeting at the Mona Lisa Restau-

rant in Los Angeles.

Although four of the speakers discussed water in various applications to paper making, the fifth and first on the program discussed labor relations in National Defense. Attendance reached a new high at this third meeting of PASC with 62 sitting down for dinner. Chairman Joachim reported that membership is growing with 22 new members added since the last meeting, nine applications on file, and a total roll

Happy to report no long minutes to be read, no committee reports to be given, no old business or new business to discuss, Chairman Joachim declared that the meeting would move immediately into the proceedings at hand and introduced the first speaker, William R. Walsh. regional director of the National

Labor Relations Board.

Mr. Walsh outlined the organization of the national and regional offices of the NLRB and discussed the functions of each in the current labor scene. He stressed the fact that 96 per cent of cases coming before the regional board never go to the board in Washington, D. C., as these are settled by consent between the disputing parties through the efforts of the regional board without further litigation. It's the four per cent you hear about, he stated.

25

pe

sel

Jo

of

SU

Th

cl

He brought out the point that the regional board functions as a clearing house primarily. Field examiners bring in the data related to cases filed with the office, discussions are held and a solution to the particular problem is endeavored by consent in Los Angeles. If this is not possible then the case must go before the national body which is empowered to act in final disposition of

The Los Angeles office, region 21, is the second most active in the United States, he said.

Following his talk, the meeting was thrown open for a discussion of the matter and Mr. Walsh responded to questions from the floor regarding the work of his office.

Some of the queries follow:

"Is the NLRB interested in the case of an individual employe who has been dismissed for inefficiency and who believes the dismissal was Mr. Walsh replied that unjust?" the board would be interested.

"In a 'tail-of-the-dog' election to select a bargaining organization, a union wins out which had previously a small representation in the company, has the company any right of recourse?" asked one paper mill executive. Mr. Walsh replied the

company has none.

A production executive inquired, "If in the instance mentioned, one union has a contract with the company and another moves in by election, is the original contract invalidated by this action?" Mr. Walsh replied that this matter had as yet never been litigated and just who owned the contract had not been determined. Whether the union owned the contract or the company had yet to be established.

"What is the status of an employe before the board who feels he is being coerced by a union?" asked a converting executive. He has no status, replied Mr. Walsh, inasmuch as the statute creating the NLRB does not treat with unfair practices



SPEAKERS at the August meeting of PAPERMAKERS and ASSOCIATES of SOUTHERN CALIFORNIA 1 1 Left to right, MERRILL W. MacAFEE, The Dorr Company, Inc.; WILLIAM R. WALSH, National Labor Relations Board; JAMES MONTGOMERY, Montgomery & Pomeroy; RAY SPARL-ING, R. W. Sparling Company; and W. W. KING, Oliver United Filters, Inc. of unions. It was, he pointed out, 25 years before a railroad could appear before the Interstate Commerce Commission in defense of it-

self.
Following Mr. Walsh's talk and the question and answer session, Mr. Joachim called on James Montgomery of Montgomery & Pomeroy to present his paper, "The Treatment of Industrial Water Supplies." His paper will appear in a subsequent issue of PACIFIC PULP & PAPER INDUSTRY.

ıt

e

e

n

t

e

e

In the absence of P. J. McGuire, western district sales manager, who was scheduled to read a paper before the group, W. W. King of Oliver United Filters, Inc., Oakland, presented the paper on "Mechanical Clarification of White Water." This paper will be published in a later issue of PACIFIC PULP & PAPER INDUSTRY.

Discussion of another important technique of attacking the problem of water clarification came from the paper following Mr. King's. Merrill W. MacAfee, engineer with The Dorr Company, Inc., presented a paper on, "Chemical Clarification of White Waters." All speakers laid special emphasis on the local problems regarding water which arise from the nature of southern California water. Unlike the water used in the Northwest mill, which is generally soft, southern California water both well and aqueduct waters from the Sierras and from the Colorado River, are hard waters presenting complications not found by paper manufacturers elsewhere on the Pacific Coast.

Ray Sparling of the R. W. Sparling Company followed discussions on treatment of water with an outline of the various kinds and types of meters used in metering industrial water supplies.

Discussion Period

• After the reading of the papers, Chairman Joachim turned the meeting over to Frank Wheelock of Fibreboard Products, Inc., who served as chairman for the question and answer session following. First question was: "What is the necessary residual chlorination in white water to inhibit slime growth?" Discussion was general. The amount of chlorination was found to vary from plant to plant under the differing conditions in each.

One superintendent stated that his mill is not adding chlorine at the machines or throughout the mill. They treat the water in settling tanks and filtering plants. The

amount of alum used, he state that the Growth to some controlled t

Another superintendent declared that his mill found no slime in copper piping and believes the use of copper pipes has helped considerably in the reduction of slime.

The meeting was a full and busy one and members were of the concensus it had been a most successful gathering providing much valuable information and an opportunity to discuss common problems for the benefit of all.

The next meeting will be held October 2nd, the program and place will be announced later.

B. C. Pulp and Paper Income Expected to Rise

British Columbia newsprint men expect that dollar revenue from their production during the second half of 1941 will be greater than during the first six months, even though there has been no change in the basic price.

change in the basic price.
Pulp sales will also be heavier, even though the present expansion program at Powell River Company's mill and at Woodfibre and Port Alice plants of B. C. Pulp & Paper Company will contribute much to new production until the turn of the year.

Nevertheless, the newsprint market has been gradually widening. There have been restrictions in sales to the Orient and to Australia, but the domestic demand has been greater.

With pulp and paper producers in the eastern provinces busier than ever, B. C. mills have been able to sell in markets closer home than would otherwise have been within the sphere of eastern mills.

Over the past year exports of Canadian newsprint, insulating board, pulp, kraft and fine papers have greatly increased, especially to countries like South Africa, British India, Egypt, China, East Indies, Argentina, Mexico, Brazil, Columbia, Chile, etc. In many cases Canada has been the only source of supply for these products.

Ray Hanchett Dies of Bullet Wound

• Raymond S. Hanchett, 57, assistant master mechanic of Fibreboard Products, Incorporated, at Port Angeles, Wash., was fatally wounded by a bullet from his rifle in his home on the morning of August 5, as he was preparing to leave for work. A coroner's jury declared the shooting accidental.

• Mr. Hanchett had eaten breakfast and

Mr. Hanchett had eaten breakfast and went into a bedroom to change shoes. Members of the family heard a shot and found him lying lifeless near a closet door in the bedroom, the rifle beside him.

An employee of the Fibreboard mill since 1933, Mr. Hanchett was widely respected in the plant and his home community and his death was a shock to hundreds of acquaintances.

Among surviving relatives are his widow; two sons, Carmi and Glenn Hanchett, both in the paper industry, and a daughter, Mrs. Leo Walsh, all of Port Angeles.

Special suggestion awards were made to employees of Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, at Camas, Washington, during the sub-foremen's meeting June 19th. These were cash awards over and above the two dollars already received for these ideas.

Gordon Young of the converting plant received \$10 for his suggestion of an improved method of perforating facial tissue. G. W. Jacobson, of the sulphite mill, was awarded \$10 for his idea of using additional four by four timbers under the stainless steel strainers around the blower pits to reduce the sewer losses. Thirty-five dollars was received by F. P. Winesett of the bag factory, who devised automatic mechanical counters on the bag machines, replacing the electric counters.

Port Angeles Men Become First Aid Instructors

● Twenty-four employees of Rayonier Incorporated and Crown Zellerbach Corporation who have recently been qualified for first aid instructors' ratings were honored at a dinner given at the Port Angeles golf club at six o'clock Wednesday evening, August 13th. These employees were from divisions of the two corporations at Port Angeels, Port Townsend, Shelton, Grays Harbor and Tacoma. Thirteen other employees of the Camas and West Linn divisions of Crown Zellerbach Corporation have also qualified as first aid instructors and were similarly honored at Camas, Wn.

Otto Hartwig, safety supervisor and social security adviser, of Portland, Oregon, was in charge of the Port Angeles dinner, assisted by Fred Pontin, first aid instructor. At the Port Angeles dinner the following resident managers of the several divisions were present to add their congratulations to the first aid instructors: A. W. Berggren, R. Dupuis, Wm. Lucey, E. W. Erickson and Geo. Cropper. Personnel and safety supervisors and their assistants from all of the above plants also joined in honoring these men.

In recognition of the many hours of extra time put in by these employees in order to attain this high rating, an instructors' certificate was prepared and an instructors' emblem or pin obtained for presentation to each one. Attractive black leather folders, with each individual's name and the company insignia stamped thereon in gold letters, were presented.

Camas Fishing Reports Optimistic

Fishermen of the Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, Camas, Washington, are again displaying their prowess. A. G. "Buff" Natwick, assistant resident manager, invaded the fishing grounds of Central Oregon on a week-end trip the middle of July, catching a 6½-pound rainbow trout in Waldo lake.

Jim Hyde, of the central technical de-

Jim Hyde, of the central technical department, went to Paulina lake, also of Central Oregon, the first of August and is reported to "have caught a few trout." Renowned salmon fishermen of Camas (one connected with the Camas Paper School) are not overly enthused with this

Service Pin Dinners Held at Camas and Lebanon

SERVICE pin presentations were held at two mills of Crown Willamette Paper Company, Division of Crown Zellerbach Corporation last month. One hundred ninety-three men and women received pins at Camas, Washington, in recognition of five to forty years' affiliation with the company. Eighteen men's services were likewise recognized at the first formal pin-presentation dinner held at Lebanon, Oregon. These dinners were held July 24th and 25th respectively.

Louis Bloch, chairman of the board of directors, Crown Zellerbach Corporation awarded pins at both meetings, and W. D. "Billy" Welsh, of the industrial relations department of the San Francisco office, presided as toastmaster at both

occasions.

Jack E. Hanny, resident manager of the Camas plant, extended official welcome to the five-year men at the Washington meeting. It was his wish in welcoming these men into the fold that all of those receiving their first pin will be attending as recipients at the ensuing presentations. Between now and then Hanny wished success to all.

Greetings from the city of Camas were extended by Mayor H. J. Woodworth.

H. G. Allen, machine tender, made the official remarks by paying homage to the company's leadership in providing schooling for the employees; what he called a "practical education with the schooling" in the Crown Zellerbach Corporation pa-

per school. Tributes further paid to the company as an employer were the unceasing safety movement and cleanliness of the plant—"no paper mill is more cleanly." Jack Hanny received tribute for his large contribution to all of these phases of the industry at Camas.

In introducing Louis Bloch, Billy Welsh said that Mr. Bloch was Camas' most interested, most concerned citizen (the city made Mr. Bloch an honorary citizen within

the past year).

Commenting on the change of industrial attitudes in his experience, Mr. Bloch told how a roll of paper rolled and broke his ankle in the early days. At that time the wage of \$4.50 per week was suspended until the injury knit sufficiently to permit returning to the job. Moreover Bloch limped home with the broken ankle as best he could. He also paid all the doctor bills.

It was pointed out how much the workman's position has improved in recent years, making it possible for the employees to do better work with less strenuous efforts and more

personal satisfaction.

As Louis Bloch presented the service pins he said these are in recognition of satisfaction and pleasure derived from the work by the recipients as well as recognition by the company. Tribute was paid to Jack Hanny by Mr. Bloch by attributing much of the success to his "guiding spirit and inspiration."

Mr. Bloch then awarded 193 Service Pins, sixteen of which were

awarded to women employees. One of these pins went to Charles G. Wallace for forty years' service with the company. Jack E. Hanny, resident manager, received his thirty-year pin.

AU

Phill Wick Ram

Rom Shiv Stac H. Rob

Jose

zo Mai Jac Ricci J Hu ma dor ber for He vin W Jac Sa W las

de de WEHEBO

Others who received pins at

Camas include

Thirty-Fve Year Pins
Harry Jones, Henry C. Karnath, J.
Verne Wallace.

Thirty Year Pin Harry G. Allen.

Twenty-Five Year Pins

William Aumock, James A. Wright, Harold William Herzig, Harold Robert Nevin, Cecil Ivan Knapp, A. M. Patterson.

Twenty Year Pins

Carl Arvid Arvidson, George Ben Beaman, Ralph M. Blake, August William Brunner, Timothy Hugh Conway, Edward D. Cunningham, Louis S. Franklin, Marion Leslie Hall, John Weston Horning, Harry O. Loveday, Fred Noyes, Gus Ostenson, Andy F. Rekdahl, Edward Oscar Rice, Harvey Sherk, Vernon E. Shoemaker, Ernest C. Stewart, Grant Alford Trullinger.

Fifteen Year Pins

William Ashe, Clay Elrun Aslin, Clarence John Beaver, Colin Holmes Brown, Walter Bryant, Howard Ellis Burrell, John Edward Byers, Frederick Albert Conner, Howard James Ells, Joe Byrne Emily, Laura Good, Louis G. Good, Jack Richard Gould, Howard Martin Green, Carl Lelose Hinman, Frank Moore Holmes, Margaret Hyde, Delmar Noble Johnson, George E. Johnson, Oscar Klee, Albert Krohn, Emery Martin.

Walter E. McDonald, Leonard D. McGlothlin, Henry Pete Michel, Walter Michel, William Oscar Neely, Carson



CAMAS 25-YEAR MEN , , , Left to right, WILLIAM AUMOCK, JAMES A. WRIGHT, HAROLD W. HERZIG, HAROLD R. NEVIN, CECIL IVAN KNAPP, A. M. PATTERSON and LOUIS BLOCH, Chairman of the Board of Crown Zellerbach Corporation who presented the service pins.

RY

One G.

ith

esi-

rty-

at

J.

ht,

ert

er-

am Ed-

rn

11,

ert ne ck Ornduff, Carolyn Ough, Roy Edward Phillips, Melvin Garfield Powell, Carl W. Wicher, Harlin Parks Willis, W. C. Ramsey, Vern R. Reeves, Albert Dewey Romine, Frank M. Selph, James Latimer Shively, Vernon Elwood Smith, Ed Stacie, Guy Willie Thompson, William H. Vilas, John Holcomb Turpin, John Robert Wardlow, Walter F. Wardlow.

Ten Year Pins

Harlan E. Adair, Ross Harold Armes, Joseph A. Ast, George Lewis Ayers, George Dewey Bailey, Hazel Booth, Alonzo Miles Cady, Lon Cardon, Lillian Mabel Carter, Earl Herman Clemons, Jack Coonrod, George E. Cunningham, Richard D. Day, Earl R. Fulton.

James Arthur Hughes, Walter James Hunter, James Beagley Hyde May Joseph

James Arthur Hughes, Walter James Hunter, James Beagley Hyde, May Jermann, Theodore R. Jurvakainen, Gordon Carol Kinney, Robert Herman Kilberg, Irene Marie Leloff, Marlvey Clifford Lewis, Charles Albert Miller, Charles Herchel Miller, John Louis Miller, Melvin A. Newkirk. Winnie Lee Paine.

ford Lewis, Charles Albert Miller, Charles
Herchel Miller, John Louis Miller, Melvin A. Newkirk, Winnie Lee Paine.
Hoover Peake, Marlin Roland Pegg,
William F. Pickett, James William Pike,
Jacob Piller, Charles Roth, Carl Edmond
Sawyer, George Schmelzer, Jessie P.
Wadsworth, Hazel Esther Walden, Douglas L. Warren, Floyd Cecil Welever,
Floyd Williams, Freda Winters Williams.

Five Year Pins

Robert H. Anderskow, Howard J. Anderson, Lawrence Anderson, Ralph Waldo Anderson, Vance Arnold Bales, Wayne Bea, Richard Lewis Beaver, Glen Edward Blanchard, Robert B. Blanchard, Hubert James Bolger, Rex. W. Brown, Ernest Lloyd Buman, Harold Wesley Busby, Delbert Maynard Bush, Alfred Calhoun.

Busby, Delbert Maynard Bush, Alfred Calhoun.
John Walter Challans (Service), Vernon Glenn Chevron, Dave Ross Christopher, Kenneth Monroe Collins, Seiford Corbin, Josephine H. Crippen, Earl Hammond Crisman, Nova Clinton Crisman, Wilbur Lile Croswell, William John Croswell, Theodore Elmer Davis, Frances Mary DeCamp,

Mary DeCamp,
George Harold Young, S. A. Young,
Frank Decker, Angelo Drichas, Monte
Harold Emery, George L. Engler, Jay F.
Ferguson, Ray Roscoe Funkhouser,
James August Gittings, William Lester
Gilbert, Wm. Patrick Godsil, Jr., Eleanora

Reed Grill, Herbert George Grubbs, James Leslie Hays.

James Leslie Hays.

Herbert Hansen, Delos Roy Harden,
Charles Edward Herb, Harold Edwin
Hill, Richard S. Horning, Edith Hudson,
Walter Francis Johnson, Ralph William
Jones, James B. Knight, Jr., Cordian
Alonzo Lowery, Raymond John Mall,
Stanley Ira Manary, Amelia Ann Mason, Lansford Lewis Maxwell.

Vern L. McGrew, Charles Meyer, Ir.,

Vern L. McGrew, Charles Meyer, Jr., Jack Malcolm Miller, Mervin Murray, Orville R. Osgood, John Melvin Ostenson, Oliver J. Perrault, Hugo Peura, John Jess Ray, John Arthur Repman, Irwin Dee Richards, Marie Radmacher, Howard Z. Rondeau.

Albert Irwin Rumpff, John Henry Schick, Alfreda Schimel, Harlyn Belford Scobba, Glen W. Smith, Walter Allen Smith, Peter A. Snoey, Ralph W. Strickler (Service), Gilbert M. Thompson, Leroy S. Thompson, Agnes M. Timmerman, Victor Arnold Torjuson (Service).

The reception committee at the Camas Service Pin dinner included R. J. Fuller of the time office; V. C. Gault, personnel supervisor; H. E. Burnett, assistant to personnel and safety supervisor; and Chuck Witt, Jr., of personnel department, who was also general chairman of the arrangements.

Guests and executives at the Camas Service Pin presentation included

Louis Bloch, chairman of the board, Crown Zellerbach Corporation; F. N. Youngman, vice president, Crown Zellerbach Corporation; J. R. Frum, assistant vice president, Crown Zellerbach Corporation, Portland; W. D. Welsh, Industrial Relations Department, Crown Zellerbach Corporation; Miles Murray, In dustrial Relations Department, Crown Zellerbach Corporation, Portland; P. F. Middlebrook, resident manager, Crown Willamette Paper Co., Division of Crown Zellerbach Corporation, Lebanon, Oregon; G. W. Charters, assistant resident manager, Crown Willamette Paper Co., Division of Crown Zellerbach Corporation, Camas; W. R. Barber, technical director, Crown Zellerbach Corporation. Camas; H. J. Woodworth, mayor, City of

Camas; Louis Blackerby, Pacific Pulp and Paper Industry; Jo Lund, Post-Record, Camas; Milton Bona, Post-Record, Camas; Ben Rogoway, Columbia Valley Advocate; V. A. Davis, president, Paper Makers Union, Local No. 130; Paul Hinz, proprietor Commercial Hotel; Frank Collins, Postmaster, chairman, Camas Paper Festival.

George Williams (Smiley); R. S. Fuller, time office; E. A. Paul, time office; Miss Christine Kropp, office; H. E. Burnett, assistant to personnel and safety supervisors; C. Witt, personnel department; Jimmy Zellerbach, industrial relations of San Francisco; Miss June Cox, Queen, Camas Paper Festival; Miss Winnifred Smith, Crown Princess, Paper Festival; Miss Frances Province, Princess, Camas Paper Festival; Miss Mary Province, Princess, Camas Paper Festival; Miss Mary Province, Princess, Camas Paper Festival; Miss Marjorie Temple, Theme Girl, Camas Paper Festival; H. Allen, Card No. 1, machine tender No. 11 paper machine.

Department Heads

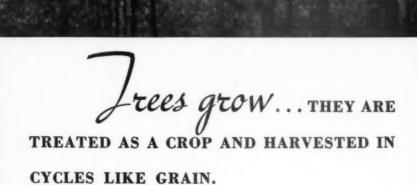
© Lyall Burnett, engineering; O. T. Defieux, steam; H. W. Duvall, converting; V. C. Gault, personnel; Jake Gigler, napkin; G. M. Julien, assistant manager; Herman Junge, wood mill, Camas; B. H. Michels, wood mill, Lebanon; H. D. Kennedy, purchase; J. J. Lobb, assistant to manager; Otto Michaelis, sulphite; P. V. Millard, finishing; L. W. Morgan, pipefitters; A. G. Natwick, assistant manager; F. A. Olmsted, technical; A. O. Olson, assistant manager; J. F. Robertson, safety supervisor; J. V. Savage, sulphite superintendent; Fred Sievers, groundwood superintendent; Fred Stevey, electrician; F. F. Sullivan, manager's assistant; W. J. Van Arnam, office manager; Ed Webberley, beater room.

The Lebanon Dinner

• At the Lebanon service pin dinner, honoring Barney Michels for completion of forty years service, Paul Middlebrook, resident manager, expressed his appreciation to the men attending the affair. He said the service pins recall to mind



AT THE CAMAS PIN PRESENTATION 7 7 7 Left to right, CHARLES G. WALLACE, who received a 40-year pin; HARRY JONES, 35 years; HENRY C. KARNATH, 35 years; LOUIS BLOCH, Chairman of the Board of Crown Zellerbach Corporation who made the presentations; HARRY G. ALLEN, 30 years; and, JOHN E. HANNY, Resident Manager at Camas, who received his 30-year pin. J. VERNE WALLACE, a 35-year man, was not present when the picture was taken.



On its fast growing timber stands in the South, Rayonier practices "selective cutting on a stand improvement program."

Diseased and crooked trees are removed. Only trees which have gained maximum growth are used for pulpwood. Cutover and barren areas are seeded or replanted. Trees which produce a sufficient volume of wood to maintain an average production of one cord per acre per year will provide the "Forests of Tomorrow", insuring a continuous domestic source of supply.

RAYONIER

Better Pulps For Better Performance

Mills: hoquiam · port angeles · shelton · tacoma, wash. and fernandina, fla.

Executive Offices: 343 sansome street, san francisco

Sales: 122 east 42nd street, new york

"service for labor," service defined as "anything in life." Appreciation was expressed to those persons who rendered direct and indirect services toward the success of the local pulp and paper plant.

Middlebrook mentioned the close cooperation between the loggers, doctors, power plant and all others directly or indirectly concerned.

A proper relationship between the men in the plant and the company, was attributed to Louise Bloch by Paul Middlebrook.

Elmer Fitzgerald of Lebanon, appearing in the absence of the mayor, bid welcome to the company executives and commended them for their cooperation. He also said that the citizenry of Lebanon realize the part Crown Willamette Paper Company has had in the growth and success of the city.

Albert Bankus, vice president of Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, making the principal speech of the evening, traced the human side of industry of the Crown Zellerbach Corporation back, through predecessors, about sixty years. He said this is something more interesting than the physical plant.

It was pointed out that the desire for security and success to the individual and his dependents is the motivating force for success, and success for the individual may be segregated into three parts.

One is the opportunity for gainful and permanent employment, for which the employees are dependent upon the stability of industry.

Second, is the application to the daily tasks and the road leading to a progressive future.

Third, of the list, includes equal and impartial opportunities for the men.

Lebanon occupies a unique situation according to Bankus. Some forty years ago a shift was made from manufacturing straw paper to sulphite wood pulp and a reputation built up for strong unbleached sulphite paper. A reputation has been built for producing high grade cartridge paper such as is wrapped around sticks of dynamite. Much of the dynamite-shell paper produced in the United States now comes from the Lebanon plant, according to Bankus.

Steady employment of men here in the mill contributes to the community and moral stability. Men have given thought and care for the jobs and have done the job exceedingly well, he commented.

Crown Zellerbach Corporation



LEBANON SERVICE PIN WINNERS 1 1 1 Left to right, ELVER RICHARDSON, 10-year pin; GEORGE BROWN, 15-year pin; MOODY OGDEN, 15-year pin; ED LECKBAND, 20-year pin; and BARNEY MICHELS, 40-year pin.

has consistently followed the rule of advancing men from within the organization whenever possible. Examples include J. E. Hanny, resident manager at Camas, who started work with the company at a drafting board over thirty years ago; Clarence E. Bruner, resident manager at West Linn, started with the company forty-three years ago; Paul Middlebrook, who started in 1914; and several others in managerial positions. All started in different avenues of activity to reach these positions. They have come from within the ranks and the organization still maintains the same opportunity for the employees.

Louis Bloch was mentioned by Bankus as perhaps the most outstanding example, having started work in 1894 in a paper bag factory at \$4.50 per week and continued, step by step, until he is now chairman of the board of directors.

Bankus said Crown Zellerbach Corporation is proud of its employees' records, and cited figures substantiating the fact that the company does not shelve older employees. Of the 4,824 employees re-

ceiving service pins, they fall in this order.

ruci.	
2	50 year
5	45 year
33	40 year
47	35 year
97	30 year
140	25 year
453	20 year
746	15 year
1415	10 year
1885	5 year

In tribute to the older men, for services well rendered, the younger men look to them for guidance and teaching. "We need youth . . . but we also need age for its care, caution and experience . . . for which no substitute has yet been found," concluded the speaker.

W. D. "Billy" Welsh told the

W. D. "Billy" Welsh told the men they can be assured that the head officials are anxious to keep the mills in production and the towns progressing, even when business slackens.

Louis Bloch, before presenting pins to the employees, said he would not have bettered himself unless he made his work a serious obligation, on one hand, and a pleasure and joy



RECIPIENTS OF 5-YEAR SERVICE PINS AT LEBANON * * * * Seated, left to right, HENRY BURIAN, JESS RAY, RONALD HOBSON, ART BARTELS, BURL SHANKS and ERNEST WEISSER.

Standing, left to right, JOHN GRAM, ADOLPH LUNHOLM, CHARLES FROMHERZ, ROY CROVER, LEO DURST, DAN CAMPBELL, and LESTER HUGHES.

BEAR BRAND CHEMICALS Made on the West Coast from WEST COAST MATERIALS



CHLORINE

Liquefies at -34.6°C. at atmospheric pressure. Not over 1.4 lbs. moisture per ton. Total residue not over 15 grams per 100 lbs.

SO₂

SULPHUR DIOXIDE

Colorless gas at normal temperatures and pressures, liquefies at -10°C. at atmospheric pressures.

NH₃

ANHYDROUS AMMONIA

Liquefies at -33.4°C. atmospheric pressure. Contains no objectionable impurities.

ZnS2O4

ZINC HYDROSULPHITE

A fine white powder. Easily oxidizable in air. Very slightly water soluble.

The Great Western Division of Dow uses West Coast sources of raw material and West Coast labor to produce its BEAR BRAND chemicals—so widely in demand throughout the Pacific pulp and paper industry.

Products of the largest plant of its kind on the Pacific Coast, BEAR BRAND chemicals afford paper manufacturers the twofold advantage of uniform high quality and immediate availability.

Profit by this opportunity to effect economies in time and operating efficiency—specify BEAR BRAND chemicals.

GREAT WESTERN DIVISION THE DOW CHEMICAL COMPANY

San Francisco,
California, U.S.A.

New York, Seattle, Los Angeles

Working with you for America

on the other. The rest, more or less, is attributable to the Heavenly Father or the Will To Do, whatever it may be. He assured all present that the "bosses" have the same desires and feelings as do the other persons; there is no line of demarcation -all are employees and have to account to somebody.

Hugh Croner, yard foreman and safety supervisor, was chairman in charge of the Lebanon Service Pin

Dinner.

Pins were awarded to the follow-

ing eighteen men:

Barney Michels 40 years Ed Leckband _____ 20 years Moody Ogden 15 years George Brown .____ 15 years Elmer Richardson 10 years

Henry Burian, Jess Ray, Ronald Hobson, Art Bartels, Burl Shanks, Ernest Weisser, John Gram, Adolph Lunholm, Charles Fromherz, Roy Crover, Leo Durst, Dan Campbell, Lester Hughes all received 5-year pins.

Ekwall of Billeruds Inspecting Coast Mills

· Axel Ekwall, chemical engineer of the Billeruds Aktiebolag of Saffle, Sweden, who is in the United States on a fellowship of the American-Scandinavian Foundation, is spending several weeks on the Pacific Coast inspecting pulp and paper mills in this region as part of his study of American production methods.

Mr. Ekwall was interviewed in Portland by Tom Humphrey of the Oregon Journal, and the interview is reproduced here with acknowledgement to the Journal.

"Remember how Grandpappy used to slap his knee and roar after telling the one about the boob who fed his cow sawdust, painting it green to fool her, and just as she was getting used to the stuff, she up and died? "Well, if that ignoramous of the gay

'90s were alive today, he'd have the laugh on Grandpappy. For the Swedes, isolated by the war, are feeding their cows sawdust, their horses too, and they're not dying on the stuff. The cows are producing milk on it and the horses

are working on it, believe it or not.
"My authority is Axel Ekwall, chemical engineer and pulp expert for the Billerud Co., Ltd., of Saffle, Sweden, fellow of the American-Scandinavian Foundation, in America to study pulp and paper manufacturing methods of the United States and Canada. And he isn't fooling, either.

Eat Wood and Like It

"You see, things are what you'd call ough in Sweden," Ekwall explained in tough in Sweden," Ekwall explained in an interview at the Multnomah hotel an interview at the Multmoman notes wednesday, after visiting the Crown Wil-lamette mill at Camas, largest manufac-turer of specialty paper in the world. "Our foreign trade, including that with the United States, has disintegrated, most foods are rationed, crops have been bad for two years and we can no longer import stock feed. And our pulp mills have been running at half capacity for a year, despite the manufacture of rayon and other products. So we've developed a really good wood pulp product for livestock. It's specially treated and shredded to resemble oats and sweetened with mo-lasses to make it palatable. It isn't as good as grain or fodder, true, but cows

and horses can live on it."
"Ekwall, who came to America by flying to Moscow, then using the Trans-Siberian railway and taking ship to San Francisco from Japan, said that while Sweden, which he left in May, is on a wartime footing and is devoting a large percentage of its national resources to national defense, its 6,300,000 people are determined to preserve their neutrality and will fight anyone-anyone, mind you -who attempts an invasion.
"In order to keep Sweden free and out

of the war, we are carefully guarding our neutrality, making ourselves as strong militarily as possible, fortifying our borders, building up our own air force, keeping our armament factories busy," Ekwall said. "Every Swedish citizen is Ekwall said. "Every Swedish citizen is subject to military training, starting with his 21st birthday, and is subject to call until he is 46. We have a large number of troops mobilized—the greater the apparent danger, the larger the number—and production of war materials is stead. and production of war materials is stead-

"As an example, the Bofors plant, makers of the world-famous 40 and 70 mm. anti-aircraft and anti-tank guns and other artillery, is running day and night, and Sweden, dependent upon the United States for military planes up to a year ago, is now developing her own fighters and bombers. Incidentally, Bo-fors guns are now being made in the United States under patents from Swe-

Food Rations in Sweden

"Ekwall admitted that food rationingmeat, bread, butter, coffe, cocoa and ten are rationed now—and using charcoal and wood gas for passenger gas is annoying, but he maintained that Sweden's morale is high, her people united. The war has also struck a cruel blow at the Swedish merchant marine-more sailors have lost their lives to date than during the whole of World War No. 1—but Swedish people are paying heavy income, property and sales taxes (5 per cent) cheerfully and recently bought \$350,000,000 worth of Swedish defense bonds bewood all Swedish civilian jallopeys must burn now is sold by service stations and is about two thirds as effective as gaso-

"Ekwall insisted that Sweden's increased trade with Nazi Europe is on a regular, not barter, basis, but admitted that it comes a long way from making up trade formerly enjoyed with America, Britain and a free Europe. Trade balances are carefully watched and Swedish merchants can neither buy nor sell what they have and want and in the quantities

"Electric power is not yet rationed, but it is carefully conserved and the public is educated to "chase kilowatts"—that is, use electricity economically. About 40 per cent of the nation's power is federally generated and 90 per cent of the government-owned railroads are electrified to conserve coal and oil.

"Ekwall's father, the late Axel Ekwall, Sr., was chief engineer for the Royal Board of Water Falls of Sweden, the Swedish national water and hydroelectric board. He visited the United States five years ago, attending the international power conference here, and was appointed president of the special subcommittee on high dams. Mr. Ekwall, Jr., is being given the cooperation of C. H. Lundell, electrical engineer in the Portland department of public utilities and secretary-treasurer of the Oregon Technical coun-cil, who knew his father and saw them both when he visited Sweden in 1937.

Learning from America

"Elkwall smiled when asked if the Americans could teach the Swedes any-

thing about pulp and papermaking.

"I'm here to study and learn, am I not?' the pulp engineer countered. 'And incidentally, I like your Oregon very much. Its green forests and grass. Its many flowers remind me of Sweden. And I was truly thrilled to arrive in a country that is still at peace, where things are still normal.'

"The Swedish chemist's favorable reference to ever-green Oregon is remindful that if Oregon ever has to feed its livestock trees, it will become the livestock center of the world."

Evald Anderson Dies in Los Angeles

 The death on Saturday, July 19th, of Evald Anderson, technical director of the Western Precipitation Corporation in Los Angeles, ended a career of unusual ac-complishment. He was one of the out-standing engineers of the country in his chosen field of activity.

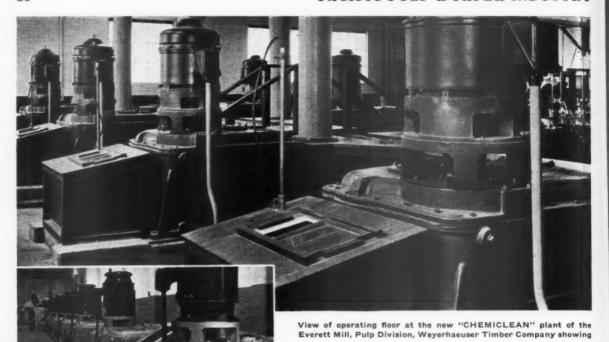
On graduating from the University of California in 1913 he joined the Western Precipitation Corporation with which he spent his entire business career. At that time the purification of gases was just becoming a matter of vital importance to industry and the fertile brain of Evald Anderson created much of the broad theoretical foundation on which the technical development and commercial application of electrical precipitation were constructed. He soon was made technical director of the company, which position he occupied until his death. His creative efforts led him into many fields and wherever he was active he established lasting friendships and gained the recog-nition and respect of his technical as-sociates. In February, 1940, he was pre-sented with a Modern Pioneers Award, sponsored by the National Association of Manufacturers, in recognition of his out-standing accomplishments.

Anderson was born in Sweden, December 3, 1883. He married Ruth Helen Davis at Riverside, California, in 1917 and has twin daughters, born in 1928. In addition he has two sisters in America as well as two sisters and two brothers in Sweden.

He was Fellow of the Association for Advancement of Science and member of the American Institute of Chemical Engi-American Chemical Society, American Physical Society and Technical Asso-ciation of Pulp and Paper Industry. He also was a member of the honorary societies Alpha Chi Sigma, Phi Lambda Upsilon and Sigma Xi.

He obtained patents on many inventions relative to electrical precipitation, mechanical dust collectors, by-product po-tash production, and was the author of many technical articles on electrical precipitation and kindred subjects.

To his business associates and many friends throughout industry he was known as "Andy" and admired as much for his generous character and kindliness as he was respected for his technical accomplishments.



British Columbia Pulp & Paper Co., Woodfibre, B. C.



Soundview Pulp Co., Everett, Wash.



Longview Mill, Pulp Division, Weyerhaeuser Timber Co., Longview, Wash.

WESTERN DRIVES, again!

Longview, Woodfibre, Soundview,

NOW EVERETT

In the new Chemical Cleaning plant at the Everett Mill, Pulp Division, Weyerhaeuser Timber Company, all drives for the eight high density reactors were built by Western Gear Works. Pacific Gear & Tool Works, San Francisco, its associate company, supplied the vertical mixers for the inter-stage washer-thickener.

> "Gear Products From Gear Specialists"

PACIFIC GEAR & TOOL WORKS

SAN FRANCISCO SEATTLE LOS ANGELES

IC WEST

RY

at r-

r

lt

Crown Zellerbach Reports Record Production, Sales, Profits

In fiscal year ending April 30th, despite increase in income taxes of 159% over 1940.

• Crown Zellerbach Corporation in the fiscal year ended April 30, 1941, established new record highs in net profits, sales, and production. The earnings peak was attained despite an income tax burden 159.3% greater than in the preceding year.

ing year.

Working capital position was improved, while prepayments of \$4,800,000 were made on long-term bank loan.

In an independently audited annual report for the fiscal year ended April 30, 1941, the company and subsidiaries show consolidated net profit of \$8,866,287 after all charges, including depreciation, depletion, interest, minority interest in subsidiaries' earnings and provision for Canadian and United States income and excess profits taxes. This is equal, after provision for regular dividends of 529,655 shares of \$5 preferred stock outstanding, to \$2.75 a share on 2,261,199 shares of common. In the preceding fiscal year the company reported consolidated net profit of \$8,119,494, equal to \$2.42 a share on the common after preferred dividends.

Tax Accruals

• United States Government and Canadian taxes on income, which aggregated \$5,718,000, increase of 159.3% over the \$2,204,806 of the preceding year, were computed in accordance with existing tax laws at the following rates: United States income tax (including defense tax) for domestic companies, 24% with minor exceptions, and for Pacific Mills, Ltd., Canadian subsidiary, income tax, 28%, excess profits tax at graduated rates up to 50% for the United States companies and at 75% for Pacific Mills, Ltd., in each instance on earnings in excess of exemptions provided for in the respective excess profits tax acts, based, for the most part, upon average earnings for certain base periods.

base periods.

Dividends paid in the past fiscal year were \$4,909,474, the same amount as was distributed in the preceding year, and consisted of the regular \$5 a share on the preferred, and \$1 a share on the common. Dividends paid in the 1941 fiscal year represent 55% of net profit, compared with 60% disbursed in the preceding year.

Sales continued their upward trend, aggregating \$66,217,406, an increase of 17% over the \$56,526,576 of the preceding year. Volume held relatively steady throughout the four quarters of the year. In the 1940 fiscal year, there were wider variations.

Sales Outlook

• With regard to sales, Louis Bloch, chairman, and J. D. Zellerbach, president, commented in the annual report: "The continued blockade of pulp and paper shipments from Europe and the stimulation of all business at home arising from the national defense program will undoubtedly result in continued heavy demand upon the nation's pulp and paper producing facilities, in which

Income Account Comparison

 Consolidated income account for Crown Zellerbach Corp. and subsidiaries for the fiscal year ended April 30, 1941, compares as follows:

Sales	1941 \$66,217,406	1940 \$56,526,576	1939 \$48,339,601
Cost of goods sold	42,157,589	36,656,135	32,628,317
Profit on sales		\$19,870,441 1,594,383	\$15,711,284 772,994
Gross operating income	\$25,893,746 6,786,311	\$21,464,824 6,544,944	\$16,484,278 6,078,386
*Other income (net)	\$19,107,435 395,558	\$14,919,880 176,827	\$10,405,892 432,620
Total income before prior charges Depreciation Depletion Interest Minority interest in subsidiaries' income Income tax (U. S. & Canada)	3,599,520 810,836 436,541 71,809	\$15,096,707 3,456,010 697,575 532,193 86,629 2,204,806	\$10,838,512 3,232,391 440,010 803,412 42,739 †1,304,570
Net profit		\$ 8,119,494	\$ 5,015,390

*Includes in 1941 \$562,785 dividends from Fibreboard Products, Inc. (pro rata of consolidated earnings for the year exceeded dividends received by \$293,427) less other expenses of \$167,227; in 1940 dividends from Fibreboard totaled \$468,930 (pro rata of consolidated earnings exceeded dividends by \$269,828) less other expenses of \$292,103; in 1939 dividends recieved from Fibreboard totaled \$468,930 (pro rata of consolidated earnings exceeded dividends by \$30,912) less other expenses of \$36,310. †Includes additional provision of \$148,748 for prior years.

Balance Sheet

 Consolidated balance sheet of Crown Zellerbach Corp. and subsidiaries as of April 30, 1941, compares as follows:

ASS	ETS		
	1941	1940	1939
Cash	5,885,815	\$ 3,948,848	\$ 3,748,158
Marketable securities	900,000	************	*************
Notes and accounts receivable	10,464,899	8,913,715	7,339,904
Dividends receivable	117,232	117,232	117,232
Inventory:			
Finished products	7,214,926	7,139,604	7,065,379
Goods in process	733,251	600,709	590,135
Materials and supplies	5,445,381	5,001,180	4,152,151
Total current assets	30,761,504	\$ 25,721,288	\$ 23,012,957
Investment in Fibreboard		\$ 5,186,131	\$ 5,186,131
Other investments at cost or less	1,217,044	1,072,420	1,308,207
Miscellaneous receivables-non-current	116,816	157,957	148,615
Land, timbers, etc. (net)	21,785,673	22,583,163	23,514,610
Buildings, machinery, equipment (net)	39,480,645	40,069,532	40,693,439
Intangibles, less amortization	7,339,259	7,428,615	7,566,323
Deferred items	809,161	817,677	740,386
Total assets	\$106,696,233	\$103,036,783	\$102,170,668
LIABI	LITIES		
'Accounts payable		\$ 3,204,387	\$ 2,491,563
Accrued pay roll and interest		1,351,457	833,559
Taxes accrued	6,801,069	3,114,920	1,957,730
Notes and debts payable	***************	***********	1,959,764
Other current liabilities	373,985	347,642	**********
Total current liabilities	\$ 12,294,692	\$ 8,018,406	\$ 7,242,616
Notes and contracts payable	\$ 9,226,802	\$ 13,800,000	\$ 16,894,779
Subsidiaries' stocks publicly held	1,186,839	1,187,290	1,212,206
Preferred stock \$110 a share)	52,965,500	52,965,500	52,965,500
Common stock (\$5 a share)	11,305,995	11,305,995	11,305,995
Capital surplus	9,129,581	9,129,581	9,129,581
Earned surplus	10,586,824	6,630,011	3,419,991
Total liabilities	\$106,696,233	\$103,036,783	\$102,170,668

PBC at WEYERHAEUSER



For producing their new "CHEMICLEAN" Unbleached Sulphite Pulp EVERETT MILL, PULP DIVISION, WEYERHAEUSER TIMBER COMPANY, selected PULP BLEACHING COMPANY equipment, including . . .

PULP METERING UNIT
ROTARY CHLORINE ABSORBER
CONTINUOUS CHLORINATION REACTOR
TWO-CYLINDER INTER-STAGE WASHER-THICKENER
8 HIGH-DENSITY BATCH REACTORS
2 TWIN-PROPELLER DILUTION CHEST AGITATORS
FINAL WASHER
CHEMICAL PREPARING and MEASURING EQUIPMENT
CENTRALIZED-CONTROL ASSEMBLY

PULP BLEACHING COMPANY

WAUSAU, WISCONSIN

CONTRACTING ENGINEERS FOR COMPLETE PROCESS INSTALLATIONS . MANUFACTURERS OF PROCESSING, WASHING, THICKENING AND AGITATING EQUIPMENT FOR THE PULP INDUSTRY

Represented in the Pacific Northwest by James Brinkley Company, Seattle, Washington

activity the corporation can be expected to share. However, inasmuch as our plants have been operating at full capacity for many months and no significant expansion in capacity is contemplated, gross sales income cannot be expected to exceed materially that of the past few months with prices at present levels."

Production of paper during the 1941 fiscal year totaled 678,558 tons, an increase of 61,242 or approximately 10% over the preceding year's output. Total company's place as an important seller of unbleached pulp was emphasized by sales of 74,148 tons last year, as against 31,384 tons the preceding year, representing 10.9% and 5.1% of total production, respectively.

Labor Relations

• Labor relations continued satisfactory throughout the year, it was jointly pointed out by Mr. Bloch and Mr. Zellerbach. The uniform labor agreement, which is negotiated for the Pacific Coast pulp and paper industry on an industry-wide basis, has again been renewed, the report stated. This renewal extends until May 31, 1942, and covers the eighth successive year of mutually satisfactory relations under this agreement. A general wage increase of 10 cents an hour, resulting in the highest hourly earnings in the history of the industry anywhere, was agreed upon between the representatives of the employes and all employers subject to the agreement.

Balance sheet as of April 30, 1941, shows total current assets of \$30,761,504, including \$5,885,815 cash, and current liabilities of \$12,294,692, indicating working capital of \$18,466,812 and a current ratio of 2.50 to 1. A year earlier, current assets were \$25,721,288, including cash of \$3,948,848, and current liabilities amounted to \$8,018,406, indicating working capital of \$17,702,882 and a current ratio of 3.21 to 1. The less favorable current ratio reflects large accruals of income taxes and substantial prepayments of long-term bank loan.

Galloway Vacations In Idaho and Oregon

• G. H. "Pinky" Galloway, assistant technical supervisor, Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, Camas, Washington, went on vacation in Idaho and Southern Oregon, August 4th to 18th, with his family.

Bill Marshall Did Some Fishing

• William C. Marshall, of Pacific Coast Supply Company, Portland, Oregon, found "quiet, good fishing, boating and swimming" at Jewell's Dell, Washington, during his vacation the first two weeks of July.

Gus Ostenson In Mexico on Vacation

RS

RY

• Gus Ostenson, paper mill superintendent, Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, Camas, Washington, motored with his family to Southern California and Mexico on a two weeks' vacation early in August.

The Chlorine Situation

• The chlorine situation as it concerns the pulp and paper industry is not yet clear as this issue goes to press. It is known by the industry that a reduction in non-defense consumption, exclusive of public health and dissolving pulp usage, will amount to at least 30 per cent. How much more than that will be taken away is the question.

It is also a question as to whether the Pacific Coast mills will be required to reduce consumption of chlorine as much as the plants in the Middle West and East.

Late in July chlorine was put under full priority by an OPACS order and administration will be by OPM. Whatever demands are now made upon chlorine producers for defense business under the priorities system will have to be supplied. As the matter stands today the remainder will be allocated by each producer among his customers according to the importance of their needs.

The first order in June to cut consumption 10 per cent below May's consumption was a blanket order covering the entire country. As chlorine cannot be stored and at present there is insufficient tank car capacity to ship Pacific Coast chlorine east, the cut had the effect of reducing production on the West Coast without benefiting anyone. Coast pulp and paper producers have protested and meetings with the OPM and OPASC are currently being held in Washington.

At present it appears that cars can be made available shortly for shipping about 15 per cent of Pacific Coast chlorine production east for defense purposes. If a zone system is voluntarily adopted in the Middle West and East whereby producers supply users close to their plants and temporarily transfer far away customers to other plants, the number of tank cars required can be materially reduced. In addition, if a system of rotating tank cars is worked out so eastern cars can be sent to the Coast and Coast cars sent eastward with the essential minum number remaining on the West Coast, a percentage higher than 15 per cent may be sent over the Rockies. This would require a centralized car allocating committee.

Defense needs override the economics of shipping chlorine across the continent. Normally this is not feasible, but today chlorine is more important than freight charges.

Additional productive capacity is being installed by several chlorine producers and by the end of the year considerable more chlorine will be produced throughout the country. The extent of this increase has not been publicly announced.

It is evident that the reduction in chlorine usage by the pulp and paper industry will result in a return to cream cast papers preferred a few years ago before the vogue for blue white papers began. The use of caustic sodia for purifying pulp has already increased and those mills equipped to employ it can substitute its use for a part of their former chlorine usage.

● With approximately one-third of their chlorine cut off the pulp and paper mills are, at this writing, free to use the remainder as they think best. It is up to them to decide whether to maintain former color standards for as much of their products as the available chlorine will take care of, and to turn the balance

out as unbleached, or to average the whole output down in color by spreading the chlorine over the entire production. A suggestion has been made that voluntary color standards be adopted to provide a degree of uniformity, but at present this has not advanced beyond the suggestion stage. The mechanics of such a system appear to some as being too complicated in view of potential benefits.

It is not expected that producers of dissolving pulp will be asked to curtail consumption, as chlorine is employed in producing dissolving pulp as an essential purifying agent as well as a decolorizer.

And dissolving wood pulp is a basic defense need to supplement the supply of cotton linters for smokeless powder, cellulose nitrate and cellulose acetate plastic production and for the production of filament and staple fiber rayon, rayon being of increased importance now that silk imports have been stopped.

Pulp Producers Issue Statistical Book

• The United States Pulp Producers Association, 112 East 42nd Street, New York City, issued early in August the 1941 edition of "Wood Pulp Statistics."

This book of 120 pages contains all of the currently available data on United States and Canadaian pulp production, imports, exports, consumption, market trends, etc. The price is \$2 per copy.

Savages Take Vacation

• During the first week of August, Jack V. Savage, superintendent of the sulphite mill, Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, Camas, Washington, went on vacation with Mrs. Savage and their son. A couple of days were spent in Central Oregon and the rest of the week at Puget Sound.

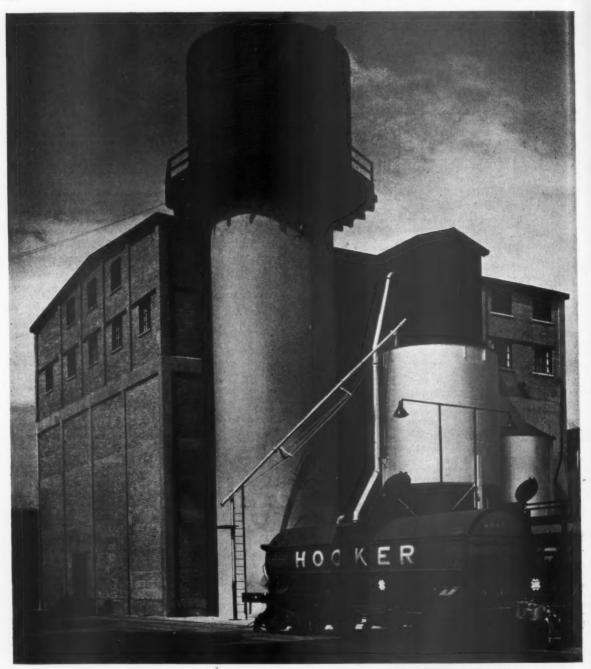
Ossian Anderson Comments On Pulp Situation

 Earlier forecasts of a pulp shortage now appear to be approaching reality, not only in unbleached sulphite but in other grades as well, according to Ossian Anderson, president, Puget Sound Pulp & Timber Co.
 "Wood pulp of all grades in storage

"Wood pulp of all grades in storage in the United States declined to 80,000 tons on June 1, 1941. Mr. Anderson said, "which compares with the March, 1940, high of 325,000 tons and with the last previous low of 215,000 tons in 1939."

Domestic demand exceeding supply of unbleached sulphite pulp this year in the amount of 300,000 tons is foreseen by Mr. Anderson on the basis of present rates of production and consumption. He quotes the O.P.M. as estimating this year's domestic demand at 1,604,000 tons, with production and imports for the first four months of 1941 running at an annual rate around 1,300,000 tons.

"Even assuming this year's production is stepped up to the highest rate of any of the first four months, and imports for the year average up to the best month of the first quarter, unbleached sulphite pulp available for domestic consumption would still reach only 1,465,000 tons, or 139,000 tons short of estimated demand," Mr. Anderson declared.



View showing Hooker Chlorine Tank Car at Chemical Cleaning Plant, Everett Mill, Pulp Division Weyerhaeuser Timber Co.

Adequate capacity, careful control of quality and uniformity of product and competent technical cooperation with pulp and paper mill technicians distinguish the facilities that have led so many to rely on HOOKER at Tacoma for their chemical requirements.

HOOKER ELECTROCHEMICAL COMPANY

NIAGARA FALLS, NEW YORK

NEW YORK CITY

TACOMA, WASHINGTON



Automatic pH Control Of Paper Stocks

Through the use of automatic equipment which controls the pH of paper stock by regulating the addition of alum (or other reagent), a number of mills are turning out finished paper which is said to have remarkable uniformity, retention and permanency. Frequently, too, there's a reported decrease in the consumption of alum... and a lengthening of wire life, due to less corrosion.

ing of wire life, due to less corrosion.

The equipment is simple. An unusually rugged electrode assembly continuously detects the pH of stock (or of white water) . . and a Micromax recording controller continuously measures, indicates and records it. Should pH begin to depart from control value, the Micromax controller, acting through an M.E.C. control unit and a powerful drive mechanism, instantly begins to readjust the reagent feed valve. This control action is of the proportioning type . . that is, a small pH deviation causes a small readjustment of the valve, while a larger pH deviation results in a correspondingly larger valve movement. This proportioning action is said to result in smooth, steady control . . . no overshooting.

The electrodes are sealed at the factory . . . no mixing of chemicals; no adjustments. These, and all other parts of the apparatus, according to the makers, are sturdily built . . fully accessible for routine checks and servicing, which any ordinary mill maintenance man can easily

perform.

To reduce the time and expense of installation, the Micromax controller and M.E.C. control unit are shipped to the user's plant mounted on a compact panel, fully connected and wired. The panel simply is stationed wherever wanted . . . the electrode assembly and drive-mechanism are mounted without costly alteration to existing equipment . . . connections are made, and the equipment placed in operation.

This pH control is described in a 16-page illustrated bulletin just issued by the Leeds & Northrup Company, 4934 Stenton Avenue, Philadelphia, Pennsylvania. A copy will be sent to anyolewho asks for Bulletin N-96-709D . . . "To Hold Paper Stock at Specified pH."

Tom Martin Back at Work

● Tom R. Martin, quality supervisor of Camas technical department, Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, returned to work August 4th, following several weeks' absence because of illness.

Bill Coster Gets Good Tan

 N. W. Coster, technical director of the Soundview Pulp Company, Everett, Washington, and a past chairman of the Pacific Section of TAPPI, returned from his vacation with a real Indian tan.

Mr. and Mrs. Coster spent two weeks vacationing among the San Juan Islands and on Hood Canal.

Andy Hawley On Vacation

• Andy D. Hawley, in charge of Seattle office of Pacific Coast Supply Company, started on a vacation to southern California, on August 6th.

Charles T. Ramsden Dies In Beloit, Wisconsin

Charles T. Ramsden, a vice president of the Beloit Iron Works, and one of the most widely known figures in the papermaking machinery industry in the United States, died early Sunday, August 3rd, at his home at 620 Park Ave., Beloit, Wisconsin, after an illness of three months.

Mr. Ramsden first became associated with the Beloit Iron Works 45 years ago as a machinist and he had been continuously associated with that industry ever since. After several years in the machine shop, he was transferred to the erecting division, later becoming its superintendent. In his capacity as director of all the erecting operations of the company, he traveled widely throughout the United States and Canada, supervising installation of Beloit papermaking machinery.

Later he was made a member of the firm's order department and still later he was transferred to the sales division where he was a sales engineer and executive for more than 25 years. Last January, following the death of Mr. G. A. Macklem, he succeeded to Mr. Macklem's post as vice president of the company.

He was a member of the Technical Association of Pulp & Paper Industry and of the American Pulp and Paper Mill Superintendents' Association.

Mr. Ramsden was born in Mineral Point, Wisconsin, on December 20, 1869. He came to Beloit 46 years ago and the following year entered the employ of the industry with which he was to be so long and so prominently associated. He

was married on February 16, 1898, at Dodgeville, Wisconson, to Miss Mary George of Mineral Point.

During his long residence in Beloit, Mr. Ramsden was prominently identified with the Catholic Church and lay organizations and with various civic activities. He was a member of St. Thomas Catholic Church and of the Holy Name Society. For many years until he moved to the city's east side three years ago, he was one of the most active members of St. Jude's parish and for more than 25 years he was a trustee of St. Jude's Church. He was also at one time Grand Knight of the Knights of Columbus in Beloit.

He was one of the founders and a member of the original Board of Directors of the Beloit Building & Loan Association and a corporator of the Beloit Savings Bank.

Mr. Ramsden is survived by his wife, a son, Francis G. Ramsden; two sisters, Mrs. Henry Haas and Mrs. Frank Hennecke, and two grandchildren, Charles and Anne Ramsden, all of Beloit.

Funeral services were held at 8:30 o'clock Tuesday morning, August 5th, at the family home in Park Avenue, and at 9 o'clock at St. Thomas Church. The Rev. Father T. A. O'Reilly officiated. Burial was in the family lot in Ridgeway Cemetery. The Rosary was recited at 7 o'clock Monday evening at the home.

Mr. Ramsden's life can well serve as a beacon to younger men in the industry. He started out as a young man with little education and rose through each department to his ultimate position. At the time of his death he had been with the Beloit Iron Works longer than any other employee. He was not only a source of information and guidance to younger men of the firm but equally so to the other executives. In this respect, his position in the company was unique and his loss will be felt keenly by men and women throughout the entire orgonization.



YOUR
RESEARCH PROBLEMS
AND OURS
ARE SIMILAR.
THROUGH RESEARCH
WE BOTH WILL
PROGRESS.



EASTWOOD-NEALLEY

At Belleville, N. J. Since 1877

Fred Weleber a Proud Father

Fred Weleber, chief chemist of Hawley Pulp and Paper Company, Oregon City, Oregon, and Mrs. Weleber became the parents of a baby boy, Richard Gordon, on June 19th.

Clark Lewis Vacationing

 Clark Lewis, shipping foreman, Longview Mill, Pulp Division, Weyerhaeuser Timber Company, Longview, Washington, took his vacation the first two weeks in August.

Crown Executives Receive 35-Year Pins

• At a luncheon in San Francisco's Stock Exchange Club, attended by a group of associates Albert Bankus, vice-president; R. O. Young, assistant vice-president; and E. C. Stalder, California Fruit Tissue Division, of the Crown Zellerbach Corporation were presented with 35-year service pins.

35-year service pins.

The presentation was made by Louis Bloch, chairman of the board of the cor-

proation.

Brown Instrument's New Northwest Sales Set Up

• The Minneapolis-Honeywell Regulator Company, of which the Brown Instru-ment Company is the industrial division, announces that the Control Equipment Company of Portland and Seattle has been acquired and will in the future op-

erate as factory branches.

In the past the Control Equipment Company has served as Northwest dis-tributors for Minneapolis-Honeywell and The entire personnel of the Control Equipment Company is being re-tained and additional men from the home office are being added to the Portland and Seattle offices to handle recently increased business.

John B. Banks, has been transferred from the Milwaukee branch to become branch manager of the Portland office at 303 Selling Building. Robert Martig, who has handled the Brown Instruments for the Seattle and Portland territories will now devote all of his time to the Portland area.

The Seattle district office, which has just moved to larger quarters at 2210 Second Avenue, will be managed by R. E. Le Riche, who was manager of the same office for the Control Equipment

Company.

Sales and service of Brown instruments in the Seattle area will be handled by W. C. Sedlacek, who has recently arrived on the Pacific Coast from the home office engineering department. Seattle office transactions will be handled by Robert Comer, recently transferred from the Detroit branch office.

With the Seattle and Portland offices operating as direct factory branches the Minneapolis-Honeywell Regulator Company and its industrial division, the Brown Instrument Company of Philadelphia, are in a position to offer complete instrumentation service. Complete stocks of parts will be maintained at both offices

Federal Government Increases Forest Protection

• On June 30 Congress passed a deficiency bill providing a total of \$1,100,000 of which according to the letter of transmittal from the Bureau of the Budget to Congress, \$1,000,000 was for expenditure on the west coast. These funds were provided to supplement funds al-ready available for forest fire protection. Half of the \$1,000,000 was allocated to the area west of the Cascade Summit in Oregon and Washington and of this \$500,000, \$320,000 is for emergency fire control on State, private, county and municipal lands, and \$180,000 is for use on the National Forests.

Very shortly after the funds became available, steps were taken to organize for the increased protection, and by everyone getting behind it the program was functioning by the time the very serious lightning situation developed about the middle of July. During this period of several days well over 1600 period of several days well over 1000 fires were started on State, private and National Forest lands of Oregon and Washington. This is believed to be an all time record. The men provided under this new program went a long way the caption of the c in combating the critical situation. one district warden put it-his suppression crew earned their full season's wages

on one fire.

In late April the problems of fire control in western Washington and north-western Oregon were reappraised by the Regional Forester and his staff. This particular area had always presented a difficult fire control problem, and the increased gravity of the situation and the consequent importance of safeguarding the forests which contributed so much to the defense program makes adequate forest fire protection doubly important. Also concentrated in this area are most of the other defense activities both military and industrial. It contains tremendously important power developments, shipyards, aircraft and aluminum facshipyards, aircraft and aluminum fac-tories and large scale forest products in-dustries. Large army and naval units are also located within the area.

As already stated, even in normal times the problem of fire protection in western Oregon and Washington is one of the most difficult in the United States. Normally, every summer has long dry spells, and on logged-off areas the amount of fuel on the ground is enormous. A network of lookouts and key fire fighters which could be expanded in times of stress has been the solution of the problem, but even with these, great conflagrations have resulted during abnormal

periods.

The spring of 1941 found the protective agencies (Federal, State and private) in this territory in a weaker position than in the past even though private and State agencies increased the funds available for protection, because the defense effort had greatly reduced the number of CCC camps and other emergency help available for fire control and had also





drained away many trained and ex-perienced fire fighters. It was felt that the chances of picking up large crews of effective fire fighters in time of emer-gency would be very slim. At the same time it was felt that the chances of fire starting in the woods would be greater. Many more people are working in the woods and much more logging equipment is in operation. More miners and prospectors are in the woods. All these activities increase the hazard. In addition in some areas the incendiary problem has always been a difficult one and any in-crease of this menace would tend to slow down defense production.

Therefore, in order to prevent dislo-

cation and interruptions to national defense activities and projects, including lumbering, airplane flights, military maneuvers, transportation, shipbuilding and similar activities of national importance within or adjacent to forest areas or dependent on forest products; to prevent local people from becoming jitprevent local people from becoming lit-tery, frightened, and worried over an un-usual number or a few large forest fires which will be readily attributed to sab-otage; a program of forest fire defense to supplement and bolster that now in effect was drawn up. The plan provides for extra smoke chasers, lookouts, pre-vention guards to check and inspect logging operations, to register forest users and keep track of them and perform other necessary prevention duties. real strength in the plan, however, was in the provision for fast action on all in the provision for rast action on all fires by providing organized, well trained, especially equipped crews of five, ten or twenty men. About 60% of the funds necessary for the plan will be used for crews

When not needed for fire suppression and the necessary training, the suppression crews will be used on protection provement, projects such as the building of fire-breaks and other jobs which are

largely labor.

This plan was submitted to the governors and state foresters in both Oregon and Washington, who heartily approved and supported the program. The state forester of each state is directly in charge of the program on state and private lands in his state. They in turn have cooperated closely with the other organized protection agencies in plans for effectively carrying out the program. Altogether the program will provide approximately 850 men and the necessary overhead and operating expenses.

overhead and operating expenses.

This program should not be considered an "all out" effort to meet a crisis, but the program is believed to be sufficient to prevent undue damage or delay to the

defense program.

Miss Schwartz **Vacations on Puget Sound**

• Miss Elizabeth Schwartz of the personnel department, Crown Willamette Paper Company, Division of Crown Zel-lerbach Corporation, Camas, Washing-ton, was vacationing on Puget Sound from July 24th to 28th. Willamette

Gaults Vacation At Cannon Beach

• V. C. Gault, personnel supervisor, Crown Willamette Paper Company, Division of Crown Zellerbach Corporation, Camas, Washington, and Mrs. Gault spent the first week of August vacationing at Cannon Beach, Oregon. Pacific Mills Reports Profit

 Pacific Mills, Ltd., Canadian subsidi-ary of Crown Zellerbach Corp., reports for the fiscal year ended April 30, 1941, net profit of \$948,033 after all charges including depreciation, depletion, and dominion and provincial income and excess profits taxes, equivalent to \$11.04 a share on 75,000 outstanding shares of ordinary stock after preference dividends, compared with net profit for the preceding year of \$1,244,897, after similar charges, equivalent to \$14.99 on the ordinary shares. Crown Zellerbach Corp. owns approximately 94% of the outstanding ordinary shares.

Profit before depreciation, depletion,

and dominion and provincial income and excess profits taxes for the year ended April 30, 1941, was \$4,139,651, compared with \$2,614,127 the preceding year. Dominion and provincial income and excess profits taxes amounted to \$2,356,969 for the 1941 fiscal year, as

against \$747,000 the preceding year.

A. B. Martin, president, said that manufacturing plants of the company operated at capacity throughout the year, as against eight months only in the 1940 feed paging. Production seeded 124,050 as against eight months only in the 1940 fiscal period. Production totaled 134,050 tons of pulp and paper products, an increase of 24,185 or 22%.

Balance sheet of Pacific Mills, Ltd., as

Balance sheet of Pacific Mills, Ltd., as of April 30, 1941, shows current assets of \$5,319,240, compared with current liabilities of \$3,067,838, indicating working capital of \$2,251,402, and a current asset ratio of 1.73 to 1. A year earlier current assets amounted to \$3,421,652, while current liabilities were \$1,512,652, while current liabilities were \$1,512,572 while current liabilities were \$1,519,357, indicating working capital of \$1,902,295, and a current asset ratio of 2.25 to 1.

Oregon City Appreciates Booklet

Under the heading "Thank You Crown Zellerbach," the Oregon City, Oregon, Enterprise recently published the following editorial comment:

"Perhaps after the presentation of 10,-000 little historical booklets to the Ore-gon City Chamber of Commerce by the Crown Zellerbach Corporation, people will not state that all big corporations are heartless.

'This gift is one that will not only be appreciated by the people of our own community, but by countless hundreds throughout the length and breadth of this United States.

"We did not want any recognition for

ourselves,' said an executive of the cor-poration in presenting the booklets to the chamber. Apparently they did not, the chamber. Apparently they did not, for the cover of this book carries the legend, 'Presented by the Oregon City Chamber of Commerce.'

"We wish to take this means of saying 'Thank You Crown Zellerbach' for this

gift of literary achievement.

Edgar Sherman Now An Ensign

 Edgar Cole Sherman, assistant technical supervisor of the National Paper Products Company, Division of Crown Zellerbach Corporation, Port Townsend, Washington, was called to active duty as an ensign in the Navy the latter part of

Mr. Sherman, a graduate of the University of Washington, received his com-mission as an ensign in the reserve after four years of training at the University.

WANTED --CHIEF RESEARCH CHEMIST...

NE of the largest cellulose producing concerns on this continent desires to contact a cellulose chemist of highest professional standing and with extensive scientific and industrial research experience with object of filling a vacancy as chief research chemist.

For the right man this is an exceptional opportunity as salary is in the higher brackets.

Forward complete record of academic activities; also industrial experience and photograph which will not be returned.

Replies will be kept strictly confidential. Address Box No. 10, Pacific Pulp & Paper Industry, 71 Columbia, Seattle, Wash.

OPASC Approves Eastern Board Price Rise

 Base prices of paper board will be increased \$2.50 per ton east of the Rocky Mountains under an agreement reached between leading paper board producers and the Office of Price Administration and Civilian Supply, Leon Henderson, administrator, announced.

The first voluntary agreement stabilizing paper board prices was worked out on June 12 and was based on prices of waste paper, the principal raw material, as of May 29, 1941.

Waste paper prices rose rapidly from the May 29 level and had increased from \$3 to \$4 per ton by June 18, 1941, when they were stabilized by agreements between OPACS and members of that trade. These agreements since have been extended to October 1, 1941, on the three low-grades of waste paper.

The new upward adjustment of \$2.50 per ton in prices for paper board was based on the increased cost of waste paper to the paper board mills since the previous agreement was reached.

Under the voluntary agreement and effective until October 1, 1941, manufacturers' prices for paper board east of the Rockies will not exceed \$45 per ton for chip board, \$60 per ton for single manila lined board, and \$75 per ton for white patent coated news board.

In addition to the higher price,

schedule of customary price differentials, based on quantity, weight and special requirements was agreed on between OPACS and the paper board producers.

During the period these prices are in effect, OPACS will conduct an exhaustive investigation of the paper board price structure and its relation to prices of

Products made of paper board.

Members of the paper board industry were urged to report to OPACS all instances of infractions of the base prices and differentials agreed on. Submission of cost data on various paper board products also was requested of the paper board manufacturers

Scott Paper Company Reports for Six Months

 The Scott Paper Company reports for the six months ended July 5 net profit of \$835,609, equal to \$1.25 each on 667,942 shares of common stock, compared with \$752,805, or \$1.12 a share, in first six months of 1940. Federal income tax calculated at proposed rate of 30 per cent, according to Thomas B. McCabe, president, and no provision made for

changes in Federal excess profits tax. Net sales were \$11,846,072, a new six months' record and increase of 16.7 per cent over net sales of \$10,149,657 reported for comparable 1940 period.

Only through the extraordinary large volume of business have we been enabled thus far to continue the new low prices announced in January, in the face of higher taxes and rising prices for raw ma-terials and other supplies," Mr. McCabe

Southern Kraft Merged **Into International Paper**

• Following the recent bond financing of the International Paper Company, the Southern Kraft Corporation, a wholly owned subsidiary, has been merged into the parent company. The purpose of the change was to simplify the corporate and no changes were made in structure personnel.

International Paper now owns directly all of the major operating properties controlled by it in the United States.

Report Record 1940 B. C. Production

 British Columbia's pulp and paper industry scaled the heights last year with an all-time high value in production— \$22,971,000, compared with the ten-year average of \$14,270,000.

These figures were issued this month These figures were issued this month by the provincial government's forest service, which gave the following comparative figures for other recent years: 1934—\$12,373,000; 1935, \$12,414,000; 1936, \$14,950,000; 1937, \$17,214,000; 1938, \$11,066,000; 1939, \$16,191,000

000.

Increase in vlue of production last year over 1939 was approximately 60

A total of 262,144 tons of newsprint was produced in the province last year, compared with 179,639 the previous year. Other papers were produced at the rate of 68,428 tons, compared with 50,870 tons the previous year. The ten-year average from 1931 to 1940 was 238,842 tons in the case of newsprint and 37,843 in the case of other papers.

According to the same authority, a total of 258,000,000 feet of timber was absorbed by the pulp mills of British Columbia last year out of a total cut amounting to 3,236,000,000 feet. Saw-Sawmills accounted for 2,310,000,000 feet.

General Dyestuff Issues New Bulletins

• The General Dyestuff Corporation of New York has lately issued two new two-page bulletins, one featuring Ethyl Violet GGA Extra and the other Blancol Conc. PDR

Ethyl Violet GGA Extra is a basic color of great tinctorial strength, says the bulletin. It is particularly well suited for coloring paper made from unbleached chemical pulp as well as from ground-wood. It is used for the production of bright shades of bluish violet at low cost in such cases where light fastness is not It can be used on unbleached essential. fiber either with or without the addition of size or alum. On bleached fiber, however, the retention is limited due to the absence of the ligneous substance, which in the unbleached fiber acts as a mor-dant. The dyestuff possesses very good solubility. If sufficient time is allowed for the color to dissolve, it can be added

to the beater even in its dry form with-out causing any color specks.

Blancol Conc PDR comes in light brown granular form and produces an amber colored solution. It is soluble in cold water at a maximum concentration of one part Blancol to two parts water. It is not in the true sense a dispersing agent as applied in the paper industry, although it does have a colloidalizing effect on certain inert materials. It is used principally as a protective colloid which tends to prevent the coagulation of several proteinaceous and resinous materials on the alkaline side. The subsequent on the alkaline side. The subsequent acidification with aluminum sulphate precipitates these sizing agents in a finely divided state.

Practical mill runs have shown it to produce excellent results when applied for the following purposes: improved sizing; increased filler and fine retention in open systems; better internal sizing and erasability; prevention of sticking at press roll; improved printing qualities; superior physical characteristics of paper; retention of basic dyestuffs on bleached pulp; reduced two-sidedness; elimination of foam specks; and, prevention of picth coagulation.

The bulletin also gives data on the methods of preparing Blancol, points of application, data on sizing, elimination of foam specks and of pitch.

General Dyestuff Corporation is represented on the Pacific Coast by H. A. Des Marais, Pacific Coast Manager, 37 Clementina Street, San Francisco, and, Robert M. True, Terminal Sales Building, 1220 S. W. Morrison Street, Portland, Oregon.



Y

of

ıc.

he

d.

of

ed on

ch

ht

n

h

12

n

PULP -

PERKINS-GOODWIN COMPANY

Established 1846

30 Rockefeller Plaza, NEW YORK

Suite 3605

- PAPER

Hardy S. Ferguson & Co.

Consulting Engineers

200 Fifth Avenue, NEW YORK CITY

Hardy S. Ferguson Member A.S.C.E., A.S.M.E., E.I.C. Moses H. Teaze Member A.S.M.E., E.I.C., A.S.C.E.

Consultation, reports, valuations, and complete designs and engineering supervision for the construction and equipment of

Pulp and Paper Mills and other Industrial Plants.

Steam and Hydro-electric Power Plants

Dams and other Hydraulic Structures.

R. E. CHASE & CO.

TACOMA BLDG., TACOMA

BRANCHES IN

SEATTLE :: PORTLAND :: SPOKANE

EQUIPMENT FOR . .

CHEMICAL ENGINEERING STEAM POWER GENERATION DUST CONTROL

Marshall and Barr

CONSULTING ENGINEERS

A Firm of West Coast Engineers, Experienced in PA-CIFIC COAST Problems of Mill Design, Operation and Supervision of Construction.

HARRY L. MARSHALL

CHARLES M. BARR

2205-6 Exchange Building, Seattle, Washington

GEORGE F. HARDY

Consulting Engineer

305-309 Broadway, NEW YORK CITY, N. Y.

MEMBER—Am. Soc. C. E.—Am. Soc. M. E.—Eng. Inst. Can.
Consultation—Reports—Valuations—Estimates—Paper and Pulp Mills
—Hydro-Electric and Steam Power Plants—Plans and Specifications.

PULPWOOD CLEANING MACHINES * * * BARKERS * * *

KNOT BORING and ROUTING MACHINES CONCAVE KNIFE AND BROUTING BIT GRINDERS

STETSON-ROSS MACHINE CO. SEATTLE, WASHINGTON

STANLEY J. SELDEN INDUSTRIAL ENGINEER

INDUSTRIAL PLANTS
PULP AND PAPER MILLS

319 PERKINS BUILDING

PHONE MAIN 8406

TACOMA, WASHINGTON

MINING WORLD

With which is combined

PACIFIC CHEMICAL and METALLURGICAL INDUSTRIES

Champion of the Mining, Chemical and Metallurgical Industries of the West

\$3.00 per year in the United States; \$3.50 per year in Canada; \$4.00 per year Foreign

71 Columbia St. SEATTLE, WASH. 1220 S.W. Morrison St. PORTLAND, ORE. 121 2nd Street SAN FRANCISCO, CALIF. 124 W. Fourth St. LOS ANGELES, CALIF.

O. C. SCHOENWERK

Consulting Engineer

3240 LAKE SHORE DRIVE CHICAGO, ILLINOIS

Pulp and Paper Mill Design – Construction

FINAL FELT INSPECTION



Every square inch of every Orr Felt is carefully examined by these two veteran inspectors. One working on the inside, the other on the outside, they carefully check for cleanliness, flawless weaving, uniform nap, and correct size. Only with their "hard-to-get" approval is an Orr Felt wrapped for shipment.

PERFECT CAN PASS

When you specify Orr Felts, therefore, you are assured absolute top quality. Your Orr Felt will arrive exactly as specified, perfectly woven, and ready to do a superior job of long-time, high-efficiency water removal.

Try Orr Felts. You will learn, as have so many other mills, that Orr's extra quality is the profitable way to cut conversion costs.

Pacific Coast Representative: WALTER S. HODGES
Pacific Bldg., Portland, Ore.

Orr Felt+Blanket Co.



A WINDER MAN SPEAKS HIS MIND

"Just a few lines in regard to operation and qualifications of a No. 20 Winder installed on high-speed paper machine here. Inside of six hours we ran 112 sets of 15" diameter rolls; and, if you know of a winder that can beat that, please notify me. I want to see it.

(Signed) WINDER MAN

"P. S. This is no brag or boast about my record or winder crew's record. We just want you to know what a real winder we have." Write for interesting illustrated folder describing Camachine 20 to CAMERON MACHINE COMPANY, 61 Poplar Street, Brooklyn, N. Y.

CAMACHINE

INDEX OF ADVERTISERS

A	M
Alaskan Copper Works	Marshall & Barr
Appleton woolen wills	. N
Bagley & Sewall Co	Nash Engineering Co. 47 National Tank & Pipe Co. 50 Northwest Filter Co. 49
Bulkley, Dunton Pulp Co 4	0
C	Orr Felt & Blanket Co 52
Cabble Excelsior Wire Mfg. Co., Wm. 49 Cameron Machine Co. 52	P Pacific Coast Supply Co 46 Pennsylvania Salt Mfg. Co. of
Chase & Co., R. E	Washington Inside Front Cover Perkins-Goodwin Co. 51 Pioneer Rubber Mills 42 Puget Sound Power & Light Co. 45
Dilts Machine Works	Pulp Bleaching Co. 38 Pusey & Jones Corp. 50
Drew & Horman 4+	R
E Eastwood-Nealley Corp 41 Edison Storage Battery Co 49 Electric Steel Foundry Co 48	Rayonier Incorporated 32 Ross Engineering Corp., J. O. 50
F	Schoenwerk, O. C
Ferguson & Co., Hardy S 51 Foxboro Co., The 2 Freeport Sulphur Co 48	Selden, Stanley 51 Shartle Brothers Machine Co Outside Back Cover Shell Oil Co. Inside Back Cover
G	Shuler & Benninghofen 48 Soundview Pulp Company 3
Great Western Division, The Dow Chemical Co	Stebbins Engineering Corp. 45 Stetson-Ross Machine Co. 51 Sumner Iron Works 47
Hardy, George F	V
Hodges, Walter S. 49 Hooker Electrochemical Co. 40 Hotel St. Francis 45	Vaughan Motor Co 1
I	Wallace & Tiernan, Inc 46
Instrument Laboratory, Inc 50	Western Gear Works 36
Lockport Felt Co	Weyerhaeuser Timber Co., Pulp Division 50